The shaded blocks below indicate reports of fishing hazards and offshore activities.

What’s inside?

New Hazards (p.2)

Area 1 (p.3)
1. Seabed Activity

Area 2 (p.4)
1. Notice to Fishermen
2. Surveys

Area 3 (p.5-10)
1. Seabed Activity
2. Survey Activity

Area 4 (p.11)
1. Seabed Activity

Area 5 (p.12-14)
1. Seabed Activity
2. Deployment of Buoys

Area 6 (N.A)

Extra... (p.15)
1. Awareness Charts
2. Fishing Plotter Files
For ‘live’ Kingfisher updates of offshore activities, visit www.kis-orca.eu and follow @KingfisherInfo on Twitter

### Area 1 – Hazard List

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Position</th>
<th>Issue Date</th>
<th>Contact Details</th>
<th>Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enquest Water Injection Flowline - Crater</td>
<td>61°28.383’N 001°30.767’E</td>
<td>28 July 2016</td>
<td><a href="mailto:Linda.Bremner@enquest.com">Linda.Bremner@enquest.com</a></td>
<td><img src="image1" alt="Map" /></td>
</tr>
<tr>
<td>Exposed cut end of pipe</td>
<td>51°04.102’N 001°24.107’E</td>
<td>14 July 2016</td>
<td><a href="mailto:kingfisher@seafish.co.uk">kingfisher@seafish.co.uk</a></td>
<td><img src="image2" alt="Map" /></td>
</tr>
</tbody>
</table>

### Area 2 – Hazard List

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Position</th>
<th>Issue Date</th>
<th>Contact Details</th>
<th>Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Suspended Wellhead – 21/19-13</td>
<td>57°22.931’N 000°43.018’E</td>
<td>28 July 2016</td>
<td><a href="mailto:Marcelle.wynter@oga.gsi.gov.uk">Marcelle.wynter@oga.gsi.gov.uk</a></td>
<td><img src="image3" alt="Map" /></td>
</tr>
</tbody>
</table>

### Area 3 – Hazard List

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Position</th>
<th>Issue Date</th>
<th>Contact Details</th>
<th>Map</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dropped objects in East Anglia Wind Farm</td>
<td>52°16.665’N 002°31.323’E</td>
<td>14 July 2016</td>
<td><a href="mailto:v.griffiths@fugro.com">v.griffiths@fugro.com</a></td>
<td><img src="image4" alt="Map" /></td>
</tr>
</tbody>
</table>

* The Hazard List is a collection of potential fishing hazards supplied to Kingfisher from across all offshore industries. Potential hazards will be listed for 6 months.
MORL Offshore Wind Farm – Met Mast Works

Please be advised that the first phase of work has been concluded on the Moray Offshore Renewables Limited (MORL) offshore meteorological mast

Met Mast Location: 58°10.928'N 002°49.215'W

MORL has concluded work on site at its offshore met mast for this summer. The mast has been returned to operational service. All navigational aids are operational.

Routine maintenance activity will commence in the coming weeks with a crew transfer vessel (CTV) being deployed to site

For further information: Moray Offshore Renewables UK Ltd, Email: john.yorston@edpr.com, Tel: 0131 556 7602 / 07557 018980
Survey Activity

Beatrice Offshore Wind Farm – Survey Works

Please be advised that Fugro (on behalf of Beatrice Offshore Windfarm Ltd) will be undertaking a survey for unexploded ordnance (UXO) across the wind farm development zone. Three different vessels will be utilised to complete survey operations:

- M.V Fugro Helmet
- M.V Fugro Frontier
- M.V Meridian

The UXO survey will commence during an appropriate weather window following 01/09/2016 and will continue over a planned minimum period of 8 weeks, weather permitting.

1. 58°21.194’N 002°51.462’W
2. 58°17.655’N 002°43.360’W
3. 58°12.608’N 003°03.122’W
4. 58°09.693’N 002°56.031’W

For further information: Courtney French, Brown & May, Tel: 01379 872145, email: Courtney@brownmay.com

Survey Activity

Beatrice Offshore Windfarm Ltd (BOWL) – Surveys

Please be advised that Clinton Marine Survey AB (on behalf of Nexans Norway AS) will be undertaking a survey for unexploded ordnance (UXO) along the Beatrice offshore wind farm export cable routes in the Moray Firth on behalf of BOWL.

The survey area includes the entire export cable corridor. At the Port Gordon nearshore area an Autonomous Underwater Vehicle (AUV) will be used for the shallow survey operations (0.4km to 5km from the beach). A survey vessel will complete the remainder of the offshore operations (5km to 70km from landfall).

The UXO survey will commence during an appropriate weather window following 27/07/2016 and will continue over a planned minimum period of 4 weeks, weather permitting.

1. 57°40.031’N 003°02.934’W
2. 57°42.966’N 003°02.217’W
3. 57°42.983’N 003°01.997’W
4. 57°45.644’N 003°01.660’W
5. 57°48.318’N 003°01.906’W
6. 57°48.328’N 003°01.997’W
7. 58°01.748’N 003°03.165’W
8. 58°01.777’N 003°03.098’W
9. 58°05.296’N 003°03.380’W
10. 58°06.957’N 003°01.158’W
11. 58°10.525’N 002°57.894’W
12. 58°09.865’N 002°56.936’W
13. 58°06.463’N 003°01.824’W
14. 58°05.229’N 003°02.733’W
15. 58°01.772’N 003°02.455’W
16. 58°01.767’N 003°02.346’W
17. 57°48.318’N 003°01.166’W
18. 57°48.304’N 003°01.273’W
19. 57°45.687’N 003°01.055’W
20. 57°42.906’N 003°01.342’W
21. 57°42.906’N 003°01.451’W
22. 57°39.850’N 003°01.834’W

For further information: Courtney French, Brown & May Marine Ltd, Tel: 01379 872145, Mobile: 07702 710178, Email: courtney@brownmay.com
Notice to Fishermen

Triton Knoll Offshore Wind Farm – Debris on Seabed

Please be advised that during the recent geotechnical operations at the Triton Knoll site, approximately 25m of communications cable was left lying on the seabed at one location. The coordinates of this location are:

53°28.325’N  000°47.769’E

An exclusion zone of 1km² has been set up around these coordinates by Triton Knoll. Recovery operations will be carried out by Fugro.

For further information: Vicki Griffiths, Tel: +44 (0) 1491 820 696, +44 (0) 7881 266 233 (mob), Email: v.griffiths@fugro.com

Seabed Activity

Gunfleet Sands OWF – Wind Turbine Generator Maintenance

DONG Energy Gunfleet Sands will be undertaking major component exchanges on wind turbines:

GFS1    A02   51°43.980’N 001°11.941’E    GFS1    C01   51°43.310’N 001°11.643’E

The work is planned to commence on 18th August 2016 and is expected to last for approx. 1 month. The works will be undertaken by the Jack Up Vessel ‘WIND PIONEER’ Call Sign: OWLA2
The JUV will be supported by 2 x Tugs and 1 x Crew Transfer Vessel

TUG: Sea Beluga  Call sign  PCBJ  TUG: Sea Bronco Call sign  PHFS  CTV: Dalby Wharfe Call sign  2GHE7

For further information: Anthony Mayhew / Steve Breeden, DONG, Tel: +44(0)1206 307 915  email: gfscoorinators@dongenergy.co.uk

Seabed Activity

Galloper Offshore Wind Farm – Explosive Ordnance & Cable Works

Please be advised that the following work will be undertaken over the next week:

• Potential Unexploded Ordnance (UXO) target investigation within the Galloper Wind Farm licensed area.
• Explosive Ordnance Disposal (EOD) works carried out within the Galloper Wind Farm licensed area.
• Survey work carried out within the Galloper Wind Farm licensed area.
• Export cable installation prep works on the seabed (Pre Lay Grapnel Run).
• Commence export cable installation at Sizewell beach with cable lay vessel Ndurance.

The export cable installation works shall commence at the near shore at Sizewell beach and will then head offshore following the proposed export cable route out towards the Galloper Wind Farm. The Anchor handling support vessels for “Ndurance” shall be “Dutch Power” and “Viking”.

An advisory safety radius of 1000m from Dutch Power during PLGR operations and Ndurance during export cable installation is recommended with permission to enter being given direct via the vessels which can be contacted on VHF 16.

For further information: Lee Cornwell, Galloper Wind Farm Limited, Mob: +44 (0)7917 474352, Email: lee.cornwell@rwe.com
Seabed Activity

First Published: 10 March 2016 | Latest Update: 24 August 2016

Dudgeon Offshore Wind Farm – Construction Works

Construction activities are in progress at the Dudgeon Offshore Wind Farm and Export Cable Corridor.

Foundation Installation
The vessel SEA Challenger will be working at the OSS location for topside work and will later perform the wind turbine generator installation onto the TP’s. Work is planned to start end of August /early September, 2016 and be completed in Q3, 2017.

Cable Installation
The NDEAVOR cable laying vessel, operated by VBMS, will install inter-array cables to connect wind turbines to the offshore substation. This operation is ongoing and expected to be completed mid-September 2016.

The Grand Canyon will be performing burial of the Inter Array Cables. This operation is expected to start late - August 2016.

Guard Vessel
The Adventure will act as a guard vessel to safe guard the wind farm area. During port calls, Advance will be her back-up. Adventure will be on location from end April expected to be completed late October.

The Rachael S will act as guard vessel at the cable jointing location until splice is trenched and protected.

The vessel Vestland Cygnus will be used for personnel accommodation at the Dudgeon field area, and for transfer of personnel based on “walk to work” onto TP’s and the OSS. Vestland Cygnus will be on location from early July until late 2016. Ndeavour and Vestland Cygnus are supported by personnel transfer vessels.

General
MARINERS ARE HEREBY INFORMED that a statutory construction Safety Zone (exclusion zone) is in place at the wind farm site. This safety zone is defined by: A 500 metres radius around each wind turbine, offshore sub-station and their foundations whilst work is being performed as indicated by the presence of construction vessels; and A 50 metres radius around each wind turbine, the offshore sub-station platform and associated foundation structures installed, complete or incomplete but waiting to be commissioned as part of the Dudgeon offshore wind farm where personnel are present on, or are being landed on or being taken from, the structures.

All vessels will exhibit appropriate lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea.

Navigation Buoys demarcating the Dudgeon Offshore Wind Farm site

For further information: Stig J. Andersen, Statoil ASA Tel: +47 95243448 email: stja@statoil.com
Seabed Activity

Rampion Offshore Wind Farm – Rock, UXO, Buys and Safety Zones

The Manu Peka – Call Sign 5BJH2 will be dredging for the HDD duct extension and the 6 x Flotation Pits.

The vessel SM-BM3-3 – Call Sign SPS2494 will be taking the spoil from the flotation pits and dumping in the agreed location North West of the Offshore Substation.

The vessel Fetsy L – Call Sign PEBV will be laying the ducts into the dredged trench.

The vessel Symphony will commence array cable installation on the 14/08/16. The first campaign is due to be complete in October 16.

Confirmed UXO 2 x 500 pound British bombs have been deployed and mariners are advised to keep a 500m exclusion/safety zone around the marker. Once the UXO has been retrieved or disposed of the buoys will be removed.

<table>
<thead>
<tr>
<th>Name</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>UXO No 1</td>
<td>50°47.511'N  00°19.173'W</td>
</tr>
<tr>
<td>UXO No 2</td>
<td>50°47.501'N  00°19.162'W</td>
</tr>
<tr>
<td>Special Mark No1</td>
<td>50°47.474'N  00°19.164'W</td>
</tr>
</tbody>
</table>

The current lattice structure has failed and will be replaced in due course.

<table>
<thead>
<tr>
<th>Name</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Met Mast</td>
<td>50°41.287’N  00°20.594’W</td>
</tr>
</tbody>
</table>

Special Yellow marker buoys with 2-3nm yellow light which flashes 1 sec every 5 seconds.

<table>
<thead>
<tr>
<th>Cardinal Buoy Positions</th>
<th>Latitude / Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50°39.439’N  00°21.931’W</td>
</tr>
<tr>
<td></td>
<td>50°38.399’N  00°16.149’W</td>
</tr>
<tr>
<td></td>
<td>50°37.629’N  00°20.928’W</td>
</tr>
<tr>
<td></td>
<td>50°36.259’N  00°12.284’W</td>
</tr>
<tr>
<td></td>
<td>50°39.170’N  00°11.365’W</td>
</tr>
<tr>
<td></td>
<td>50°42.072’N  00°17.095’W</td>
</tr>
<tr>
<td></td>
<td>50°41.375’N  00°21.901’W</td>
</tr>
</tbody>
</table>

Safety Zone Application

- Rampion Offshore Wind Farm - Application of Safety Zones during construction
- The Secretary of State Mr Keith Welford has approved the Application of Safety Zones on the project.
- A Statutory 500m Safety Zone around all structures where a construction vessel is present.
- A Statutory 50m Safety Zone around all structures including the Offshore Sub Station whilst personnel are working on said locations.

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

Survey Activity

Hornsea Two Offshore Wind Farm – Geotechnical Investigations

Mariners are advised that Hornsea Project Two has completed all geophysical site investigation works. Geotechnical investigations are still planned and works are expected to commence 30 July 2016. The geotechnical survey area is located within the UK Sector of the North Sea off the coast of East Yorkshire.

The geotechnical operations will commence on the 05 August 2016 and run for approximately 10 weeks. The exact finish date is dependent on the prevailing weather conditions, vessel downtime and work progress, but the forecasted completion date as of the publication date of this notice is the end of October 2016.

The geotechnical vessels will be deploying seabed drilling and testing equipment. This will require them to be in DP and remain stationary for periods of up to 18 hours at a time and will restrict their ability to manoeuvre. It will be requested that all vessels operating within the area keep a safe distance (1000m) and pass at minimum speed to reduce vessel wash.

For further information: Nick Garside and Courtney French, Mob: +44 (0) 7538 827 013, Mob: +44 (0) 7702710178

Area 3
Seabed Activity
First Published: 19 May 2016 | Latest Update: 14 August 2016

London Array Offshore Wind Farm – Wave Buoy Deployment

Please be advised that an additional wave rider buoy has been deployed within the area of London Array Offshore Wind Farm, designation – Long Sand Middle

New Wave Buoy

<table>
<thead>
<tr>
<th>Identity</th>
<th>Coordinates</th>
<th>Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Sand (Middle)</td>
<td>51°40.828'N 01°31.177'E</td>
<td>Fl (5) Y 20s 2nm</td>
</tr>
</tbody>
</table>

Description of wave rider buoy: Yellow spherical buoy, transparent top dome with solar panels and flashing light.

Existing Wave Buoy

<table>
<thead>
<tr>
<th>Identity</th>
<th>Coordinates</th>
<th>Light</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knock Deep (North)</td>
<td>51°37.064'N 01°30.364'E</td>
<td>Fl (5) Y 20s 2nm</td>
</tr>
<tr>
<td>Guard Buoy (North)</td>
<td>51°37.105'N 01°30.467'E</td>
<td>Fl (5) Y 20s 2nm</td>
</tr>
<tr>
<td>Guard Buoy (South)</td>
<td>51°37.058'N 01°30.307'E</td>
<td>Fl (5) Y 20s 2nm</td>
</tr>
</tbody>
</table>

The Knock Deep North wave rider buoy is protected by 2 guard buoys stationed approximately 50 - 100 meters to the North and South.

Description of wave rider buoy: Yellow spherical buoy, transparent top dome with solar panels and flashing light.

Description of guard buoys: Yellow spar with flashing light and radar reflector.

For further information: Duty Marine Coordinator, Tel: +44 1843 855 795 email: marinecoordinators@londonarray.com

Seabed Activity
First Published: 11 August 2016 | Latest Update: 11 August 2016

Lincoln and Lynn & Inner Dowsing (LID) – Foundations, array and export

Lincoln and LID Offshore Wind Farms wishes to advise mariners that the survey vessel EGS Pioneer will imminently be operating in and around the Lincs & LID Wind Farm sites from 18th August 2016 for a period of 21 days.

- LID foundations, array cables and export cables
- Linics Foundations and array cables
- Docking Shoal met mast location. Coordinates 53°09.471'N 000°38.869'E

Mariners should maintain a safe clearance distance of 500 m from the relevant wind turbine when the vessel is on station adjacent to that wind turbine.

For further information: Simon Prince: 07920273866 (simonp@smchse.com)

Survey Activity
First Published: 05 July 2016 | Latest Update: 27 July 2016

Norfolk Vanguard Offshore Wind Farm – Survey Works

Fugro Survey B.V in conjunction with Fugro EMU Ltd. will be surveying Norfolk Vanguard offshore wind farm and export cable route located on the east of the United Kingdom, this work will start the beginning of August 2016. The project will last for till end of September 2016.

The main survey vessels are the RV Discovery (Call Sign: 2AEL8) and Fugro Pioneer (C6BH3).

The area below defined the wind farm area. The export route to show will also be surveyed.

| 5.52°56.152’N 002°18.554’E | 7.52°49.647’N 002°34.263’E | 9.52°48.052’N 002°26.624’E |
| 6.53°02.613’N 002°34.272’E | 8.52°48.791’N 002°33.473’E |

For further information: Peter-Paul Lebbink, Fugro, Email: p.lebbink@fugro.com, Tel: +31 6 126 74 359
Survey Activity

Hornsea One Offshore Wind Farm – Geophysical Investigations

Mariners are advised that Hornsea Project One are continuing its geophysical investigations within the area of operations as illustrated below. The areas are located within the UK Sector of the North Sea off the coast of East Yorkshire. Activities will centre on Hornsea Project One export cable corridor and wind farm.

Export Cable Corridor/Interlink (Windfarm)
Please be advised that Hornsea Project One will be continuing geophysical investigations with the MV ATHENA and MV TETHRA on behalf of DONG Energy. Operations started on the 1st June and the forecasted completion date is 5th August.

Wind Farm
Please be advised that Hornsea Project One will be continuing geophysical investigations with the MV VICTOR HENSEN, MV HELMERT, MV TETHRA and MV Frontier on behalf of DONG Energy.

- Wind Farm West/Centre: the MV VICTOR HENSEN forecasted date for survey completion is on 29th August.
- Wind Farm East: the MV HELMERT forecasted date for survey completion is on 19th August.
- Wind Farm Centre: the MV FRONTIER is forecast to be on site from 27th July and survey completion date is expected on 31st August.
- Wind Farm West: the MV TETHRA is forecasted to be on site from 28th July and survey completion date is expected on 22nd August.

The planned geophysical investigations will include utilising an array of hull mounted and towed equipment including sub-bottom profiler, side scan sonar, multi-beam echosounder & magnetometer.

For further information: Nick Garside and Courtney French, Mob: +44 (0) 7538 827 013, Mob: +44 (0) 7702710178

Seabed Activity

Race Bank Offshore Wind Farm – Construction Work

Construction work at the Race Bank Offshore Wind Farm is underway. Dong are advising the “Fishing Clearance Zone”, including the wind farm perimeter and export cable corridor, is closed to fishing. If required, Dong should be contacted to discuss this.

As from 8 July 2016 the cable end of the Race Bank’s first export cable has been laid in a position located within The Wash and Intertidal Zone, approximately 8Km NNE from the River Nene entrance in position:

- 52°53.118’N 00°15.492’E

The Cable End is buried 30cm below the sea bed and will be marked by a special mark buoy (Yellow X with light). Work will consist of cable laying, foundation and WTG & Sub Station installation, surveys and other associated works to enable the development of the Wind Farm. The works are anticipated to run until 31st August 2018.

Demarcation buoys deployed on the 5th February 2016 will mark the main array at the following locations:

<table>
<thead>
<tr>
<th>North Cardinal Buoy</th>
<th>53° 20.333’ N 0° 46.096’ E</th>
<th>Special Mark Buoy</th>
<th>53° 12.985’ N 0° 53.459’ E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Mark Buoy</td>
<td>53° 17.533’ N 0° 50.175’ E</td>
<td>Special Mark Buoy</td>
<td>53° 17.764’ N 0° 45.822’ E</td>
</tr>
<tr>
<td>Special Mark Buoy</td>
<td>53° 15.696’ N 0° 56.311’ E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ALL VESSELS ARE REQUESTED to navigate with caution when in the vicinity of construction vessels. Please keep a minimum of 500 meters from vessels in operation. All vessels working within the site will exhibit the lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea and will maintain a listening watch on IMM VHF 16.

MARINERS ARE ADVISED to monitor VHF 16 when navigating in the vicinity of construction vessels.

For further information: Rebecca Goff, DONG, Tel: 0044 776 170914 rebgo@dongenergy.co.uk
Survey Activity

Thanet Extension Offshore Wind Farm – Survey Works

Notice is hereby given that Fugro will be conducting a geophysical survey for the Thanet Extension. Fugro Survey B.V in conjunction with Fugro EMU Ltd will be surveying the area surrounding Thanet Offshore Wind Farm (TOWF) and export cable route in relation to a potential extension to TOWF.

The survey area is located off the Kent coast in the south east of the United Kingdom, this work will commence early July 2016. The project will last until mid-September. The main survey vessel is the RV Discovery (Call Sign: 2AEL8).

The area below defined the wind farm area. The export route to show will also be surveyed.

1. 51°27.600'N 001°29.673'E
2. 51°28.190'N 001°30.716'E
3. 51°28.205'N 001°31.821'E
4. 51°26.580'N 001°34.171'E
5. 51°27.652'N 001°36.069'E
6. 51°27.650'N 001°38.118'E
7. 51°27.691'N 001°42.344'E
8. 51°28.342'N 001°42.655'E
9. 51°28.347'N 001°43.082'E
10. 51°27.795'N 001°43.931'E
11. 51°25.464'N 001°41.271'E
12. 51°24.055'N 001°41.264'E
13. 51°22.739'N 001°41.514'E
14. 51°22.787'N 001°40.638'E
15. 51°22.846'N 001°39.558'E
16. 51°24.165'N 001°37.659'E
17. 51°23.025'N 001°36.289'E

For further information: Peter-Paul Lebbink, Fugro, Email: p.lebbink@fugro.com, Tel: +31 6 126 74 359
North Coast Cornwall—Wave Hub Maintenance

Please be advised that vessel THV Patricia completed the annual navigation mark maintenance on the 13th August 2016 and is now clear of the Wave Hub offshore site.

Assigned positions and key characteristics of Wave Hub Aids to Navigation can be found in the table below. All Wave Hub operated navigation marks are currently on station, in good order and functioning correctly.

<table>
<thead>
<tr>
<th>Details</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Cardinal – 3m Diameter Buoy</td>
<td>50° 23.059’ N 005° 38.241’ W</td>
</tr>
<tr>
<td>AIS Station + 6m Focal Plane, White 7nm Light: VQ</td>
<td>50° 20.637’ N 005° 35.006’ W</td>
</tr>
<tr>
<td>South Cardinal – 3m Diameter Buoy</td>
<td>50° 22.791’ N 005° 37.943’ W</td>
</tr>
<tr>
<td>6m Focal Plane, White 7nm Light: VQ(6)+LF(1)10s</td>
<td>50° 22.999’ N 005° 35.901’ W</td>
</tr>
<tr>
<td>Special Mark – 3m Diameter Buoy</td>
<td>50° 20.894’ N 005° 35.378’ W</td>
</tr>
<tr>
<td>4m Focal Plane, GPS Synchronised, Yellow 5nm Light: FL.Y.5s (Sync)</td>
<td>50° 20.541’ N 005° 37.196’ W</td>
</tr>
</tbody>
</table>

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

Barrow & Walney 1 & 2 Export Cables – Survey

A geophysical survey to establish the burial depth along the whole length of both the BARROW OFFSHORE WIND FARM EXPORT CABLE and the WALNEY 1 & 2 EXPORT CABLES will start today.

The survey is expected to last until the end of September, depending on weather and conditions, and will be carried out by two vessels, the 14.7 meter Catamaran vessel ‘DEEP VOLANS’ and the 5.2 meter ‘DEEP PURPLE’.

‘DEEP VOLANS’ will cover the offshore sections of the cables while ‘DEEP PURPLE’ will cover the sections close to the shore.

As both survey vessels will be using highly sensitive equipment, depth-of-burial/ORION DoBstar, sub-bottom profiler, Bathymetric (Multi-Beam Echo Sounders) and Side Scan Sonar, a wide berth minimum 500 meters, is requested at all times whenever the vessels are on site and passing vessels are requested to reduce speed if possible.

Fishermen using pots are requested move any gear away from the EXPORT CABLES during this survey as ‘DEEP VOLANS’ will at times be using an R.O.V.

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

Seabed Activity

Walney Extension Wind Farm – Safety Zone Application


The precise start date and co-ordinates of the Safety Zones will be detailed in the Notice to Mariners, prior to the commencement of construction and major maintenance operations. Copies of the safety zone scheme may be obtained by contacting GAVSC@dongenergy.co.uk, 020 7811 5253.

Any person wishing to make representations to the Secretary of State about the application should do so in writing to the Secretary of State, Department for Business, Energy and Industrial Strategy, c/o National Infrastructure Consents Team, Area B, 4th Floor, 3 Whitehall Place, SW1A 2AW, London UK, email: deccnic@decc.gsi.gov.uk stating the name of the proposal and the nature of their representations, not later than Monday 12th September 2016. The National Infrastructure Consents Team will co-ordinate the receipt of any representations and will pass to the applicant a copy of any representations received unless the person or persons making the representations expressly request that their comments should not be copied to the applicant.

For further information: Gavin Scarff, DONG, Tel: +44 20 7811 5253, Mob: +44 7469 377056, Email:gavsc@dongenergy.co.uk
Seabed Activity

Ormonde Offshore Wind Farm – Small Section of Exposed Array Cable

A Bathymetric survey to monitor and measure the depth of the INFIELD or INTER-ARRAY CABLES, including the ones going to the Sub-Station, is scheduled to start on or around Monday 15th August.

Shallow buried and possibly partly exposed cable is suspected along a section of the C-String between Turbine OR-C4 and OR-C5 and fishermen are requested to take note and keep clear until notified that the cable has either been re-buried or remedial action to protect the cable has been carried out.

<table>
<thead>
<tr>
<th>Turbine</th>
<th>Coordinates</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4</td>
<td>54°05.429’N 03°25.953’W</td>
</tr>
<tr>
<td>C5</td>
<td>54°05.627’N 03°26.309’W</td>
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</tbody>
</table>

The Bathymetric survey of the Inter-Array cables will be followed by an R.O.V. survey of the Sub-Structure Jackets to examine cable entry/marine growth/scour measurement and the general condition of the Jacket.

Both parts of the survey, with an expected time frame of two weeks depending on weather and conditions, will be carried out by the Wind Cat Workboat ‘WIND CAT 37’ using Multi-Beam Echo Sounding equipment for the cable survey and a remote R.O.V. for the Jacket survey.

This survey is not expected to interfere with any other vessel but as ‘WIND CAT 37’ will be using highly sensitive sounding equipment and at other times the R.O.V. a wide berth, minimum 500 meters, is requested and passing vessels are requested to reduce speed if possible.

For further information: Duty Marine Coordinator, Tel: +44 1843 855 795  email: marinecoordinators@londonarray.com

Seabed Activity

Burbo Bank Extension – Construction Activities

All 32 Mono-Piles complete with Transition Pieces as well as the Sub-Station have now been installed.

17 sections of the Inter-Array (Infield) Cables have now been laid by the Cable Lay Vessel ‘WILLEM de VLAMIGH’ which will also lay the Export Cables.

The Turbine installation vessel ‘SEA INSTALLAER’ is currently mobilising at the Cammell Laird Ship Yard and can be expected on site shortly to start installing the Tower and Turbine sections.

CTV’s will transit to the site from Cammel Lairds on a regular basis and due to unexpected handling difficulties that are being experienced in the strong tides when the CTV’s and service boats are fully laden they will be increasing the speed ‘over ground’ from 8 knots. to 12 knots, please note the below:

- DEWP will impose a speed ‘over the ground’ limit to 12 knots between the Cammel Laird Pontoon and a line East (090°) from the New Brighton Lighthouse for all CTVs exiting/entering the Port of Liverpool via the main Crosby Channel.
- DEWP will impose a speed ‘over the ground’ limit to 12 knots between the Cammel Laird Pontoon and a line between the following positions 53 26.5N 003 09W & 53 28.5N 003 07W for all CTVs exiting/entering the Port of Liverpool via the Rock Gut channel.
- DEWP will encourage all CTVs operating on the project to call vessels in the Rock Gut Channel when transiting the area.

A series of CARDINAL and SPECIAL MARKER BUOYS are to be deployed at the proposed Burbo Bank 2 (EXTENSION) WIND FARM SITE to mark what will become the construction area and all mariners are requested and advised to mark the positions of these Buoys on their charts/plotters.

The Buoys are scheduled to be deployed on or around Friday 1st April and will remain in place to mark the construction site until the Wind Farm is built and fully commissioned.
**Seabed Activity**

**West of Duddon Sands OWF – Scour protection rock dumping**

The survey vessel ‘PROTEUS OF LIVERPOOL’ is back on site to continue the survey of the recently applied Scour Protection/Rock Dumping at selected positions along the WoDS EXPORT CABLE.

This survey is being carried out using Multi-Beam Echo Sounders and Side Scan Sonar and although it is not expected to interfere with any other vessel a wide berth, 500 meters, is requested around ‘PROTEUS OF LIVERPOOL’ while on site and passing vessels are requested to reduce speed if possible.

The vessel requests a 500m safety radius with permission to enter being given direct via the vessel after initial contact on VHF 16.

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**Subsea Cable Length From**

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<tr>
<th>Buoy Ref.</th>
<th>Location</th>
<th>Type</th>
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<td>NM2</td>
<td>53°30.371'N 003°18.284'W</td>
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<td>NM3</td>
<td>53°30.390'N 003°14.040'W</td>
<td>Special mark Fl Y 5s</td>
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<td>NM4</td>
<td>53°27.610'N 003°11.625'W</td>
<td>South Cardinal Q(6) + L Fl 15s</td>
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<td>NM5</td>
<td>53°27.604'N 003°15.159'W</td>
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<td>NM6</td>
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<td>NM7</td>
<td>53°28.970'N 003°21.001'W</td>
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**Kingfisher Awareness Flyer: West of Duddon Sands Offshore Wind Farm**

For further information: Gavin Scarff, DONG. Tel:+44 20 7811 5253 email: gavsc@dongenergy.co.uk

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For ‘live’ Kingfisher updates of offshore activities, visit www.kis-orca.eu and follow @KingfisherInfo on Twitter
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Local Awareness Charts

<table>
<thead>
<tr>
<th>Chart</th>
<th>Area</th>
<th>Location</th>
<th>Turbines</th>
<th>Developer</th>
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<tr>
<td>Barrow</td>
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<td>Burbo Bank</td>
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<td>Galloper</td>
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<td>Greater Gabbard</td>
<td>3</td>
<td>26km off Orford, Suffolk</td>
<td>140</td>
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<tr>
<td>Gwynt y Mor</td>
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<td>160</td>
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<td>Gunfleet Sands 1, 2 &amp; 3</td>
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National Awareness Charts

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<td>North West Approaches &amp; North Sea North</td>
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<tr>
<td>North Sea Central</td>
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<tr>
<td>North Sea South</td>
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<tr>
<td>English Channel</td>
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<tr>
<td>South Western Approaches</td>
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National Fishing Plotter Files

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