The shaded blocks below indicate the areas of activity published within this Bulletin.

This Bulletin, along with previous issues, can be viewed at: www.kingfishercharts.org, or you can register for an email alert by contacting: kingfisher@seafish.co.uk

All co-ordinates listed in this Bulletin refer to WGS84 datum
West of St. Ninian’s Isle – Scientific Deployment

Aegir Wave Power has redeployed a waverider buoy around 4km off the coast of St. Ninian’s Isle, southwest Shetland.

The buoy is yellow, 0.7m in diameter and fitted with a yellow flashing light. The buoy is moored by a slack line with underwater floats with allows the buoy to move around a 200m watch circle. Mariners are asked to keep a distance from the buoy. 59°58.560’N 001° 26.500’W

The buoy will remain onsite for between 1-3 years. NAFC Marine Centre will monitor and maintain the buoy while it’s onsite.

For further information, please contact: R.Hart, Aegir Wave Power, Tel: 0131 5612555, Email: enquiries@aegirwave.com

Cantick Head (Orkney) – Waverider Deployments

Partrac recovered three bottom-mounted ADCPs (BMADCPs) frames. Site ST015 frame is still in place. There is no surface marker at these location.

<table>
<thead>
<tr>
<th>Station</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST015</td>
<td>58° 45.672’N 003° 14.885’W</td>
<td>Recovery Planned 23/10/12</td>
<td></td>
</tr>
<tr>
<td>ST018</td>
<td>58° 45.333’N 003° 13.751’W</td>
<td>Not Yet Deployment</td>
<td></td>
</tr>
<tr>
<td>ST019</td>
<td>58° 45.278’N 003° 14.517’W</td>
<td>Recovered 30/06/12</td>
<td></td>
</tr>
<tr>
<td>ST021</td>
<td>58° 45.292’N 003° 15.501’W</td>
<td>Recovery Planned 23/10/12</td>
<td></td>
</tr>
<tr>
<td>ST022</td>
<td>58° 45.319’N 003° 17.164’W</td>
<td>Recovered 30/06/12</td>
<td></td>
</tr>
<tr>
<td>ST023</td>
<td>58° 45.790’N 003° 17.438’W</td>
<td>Recovered 30/06/12</td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Judy McKay, Partrac, Tel: 0141 552 3903, email: jmckay@partrac.com
NAREC Offshore Demonstrator Platform – Construction Activities

Installation vessel MPI Adventure is currently jacked up on the NAREC Offshore site, 3NM off Blyth. The foundation jacket has been positioned on the seabed. All 3 piles have been stabbed and drilling operations are currently in progress.

During this period, a 500m safety zone has been established and all vessels are requested to keep clear. Once the foundation is fully installed, MPI Adventure will lift on the platform and tower sections. During these activities, a 500m safety zone will be established and vessels are requested to keep clear. During construction activities, personnel transfer vessels Endurance and Celtic Challenger will be transiting between the Port of Blyth and the construction site.

Installation: NOAH
Position: 55° 08'.775'N 001°25'.252'W
Markings: NH
Height: 106.5m above chart datum
Colour: Yellow
Lights: All round white light flashing Morse 'U' 15s, 23m, 10M
Sounds: Morse 'U' 30s

For further information, please contact: Jonathan Nuttall, Tel: 07827 933 507, Email: noah.traffic@searoc.com
Teesside Offshore Wind Farm – Construction Activities

Teesside Offshore Wind Farm is located within Tees Bay approximately 1.5km off the coast of Redcar in Cleveland. The site will consist of 27 Siemens 2.3 MW Turbines and is connected by two undersea export cables to an onshore sub-station based at Warrenby.

Installation
Activities complete this week:
- Substation on Tod Point Road Warrenby - Construction complete and substation live. Continue commissioning and testing.
- Cable Route from Substation to Site - Completed pending testing.
- Windfarm Site - Installation of TP’s completed.
  - Installation of inter array subsea cables completed.
  - Burial of subsea cables progressing well.
  - Mobilise Jack Up vessel in Hartlepool and commence tower installation offshore.

During the construction phase of the project, PD Teesport will implement a Safety Zone marked by four Cardinal Buoys around the construction zone. The cardinal buoys will mark the corners of an area designated by the Harbour Authority as a “Safety Zone” between the 1st February 2012 and November 2012.

For further information, please contact: Simon Prince / Richard Hart, RSS Marine, Tel: 01723 893930, Mob:07920 273866, Email: sprince@rssmarine.co.uk

London Array Wind Farm – HV1/HV4 Subsea Rock Installation

There are a total of four 150kV power cables to be installed from a landfall in The Swale, north of Cleve Hill, Graveney out to the London array wind farm approximately 12 miles from the Kent and Essex coasts. The next cable to be trenched is HV1 (near Substation 1), after which the trenching work scope on HV4 shall commence.

SRI work consists of post-lay rock installation on the HV1 and HV4 export cables at crossings with Kentish Flats wind farm export cables and a crossing with the BritNed interconnector cable

Offshore loading operations will be conducted at Margate Road anchorage.

Bulk Carriers transferring rock material to Margate Road anchorage, the following vessels are anticipated: - MV Henriette (IMO 7110995) - MV EDMY (IMO 7926409)

SRI operations for the London Array windfarm area will be conducted within the area defined by the coordinates below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margate Road Anchorage</td>
<td>51°25.00’N 001°22.00’E</td>
</tr>
<tr>
<td>BritNed HVDC interconnector crossing</td>
<td>51°28.50’N 001°17.50’E</td>
</tr>
<tr>
<td>Kentish Flats export cables crossings</td>
<td>51°25.25’N 001°06.00’E</td>
</tr>
</tbody>
</table>

Side Stone Dumping Vessel HAM 601 will be conducting the SRI activities from 25/11/2012 until 24/12/2012 For 28 Days

For a copy of the Kingfisher Awareness Flyer for the London Array Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: London Array Offshore Wind Farm

For further information, please contact: Email: londonarraytraffic@dongenergy.dk, Tel: +44(0)7909414690 or +45 31727585
East Anglia Offshore Wind Farm – Recording oceanographic Equipment

Recording oceanographic equipment will be moored at the following locations. The deployment date is likely to be on or around 5th December 2012. At each site there will be a yellow toroidal shaped guard buoy fitted with a radar reflector and a yellow light. The Waveriders also have a yellow light.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Waverider Buoys</th>
<th>AWAC on seabed Landers</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cefas Endeavour VQHF3</td>
<td>52°50.162’N 002°50.984’E</td>
<td>52°52.224’N 002°53.435’E</td>
<td>5th December 2012 20 Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>52°56.366’N 002°46.500’E</td>
<td>52°33.404’N 002°46.577’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>52°09.281’N 002°09.368’E</td>
<td>52°10.627’N 002°15.014’E</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>52°18.620’N 002°27.490’E</td>
<td>52°09.281’N 002°09.368’E</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Cefas, Tel: 0044 (0) 1502 562244

Lincs Offshore Wind Farm – Construction Activity & Survey

Ongoing wind turbine erection is being undertaken at selected locations by the “Resolution”. 500m safety zones will apply around these locations during wind turbine erections, reverting to 50m safety zones once complete. Temporary navigation lights (Fl Y 2.5s with 2nm range) are in place on all installed foundations.

Start of wind turbine installation for cycle #8 is about to commence (Turbine numbers: LS34, LS35, LS36, LS37, LS38), additional details include:

- The Wind Solution is anchored to the east of the site providing accommodation for personnel working on WTG erection
- Continuation of secondary foundation and commissioning works at selected locations via various vessels
- Ongoing works around offshore substation
- Burial of cables within main site via Reef Despina
- Hunsrt of Grimsby will continue to provide guard vessel duties between KP8.0 and KP24.0

Inter-Array Cables – Main Site

All inter-array cables are now installed, although some exposed cable ends exist near turbines. Mariners are reminded of the 50m Safety Zones in existence around all uncompleted structures.

Export Cables

The Hunsrt of Grimsby remains on site to provide guard vessel duties between KP8.0 and KP24.0.

Coordinates of Operations

The position and type of these buoys is shown below:

<table>
<thead>
<tr>
<th>Buoy</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Buoy</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Cardinal (VQ (3) 5s)</td>
<td>53°17.340’N</td>
<td>00°28.740’E</td>
<td>Special Mark (Fl Y 2.5s)</td>
<td>55°12.990’N</td>
<td>00°30.850’E</td>
</tr>
<tr>
<td>East Cardinal (VQ (3) 5s)</td>
<td>53°10.070’N</td>
<td>00°31.490’E</td>
<td>North Cardinal (VQ)</td>
<td>53°15.170’N</td>
<td>00°33.500’E</td>
</tr>
<tr>
<td>Special Mark (Fl Y 2.5s)</td>
<td>53°10.670’N</td>
<td>00°31.500’E</td>
<td>West Cardinal (VQ) (9) (10)</td>
<td>53°14.670’N</td>
<td>00°27.020’E</td>
</tr>
<tr>
<td>East Cardinal (VQ (3) 5s)</td>
<td>53°12.440’N</td>
<td>00°31.460’E</td>
<td>West Cardinal (VQ) (9) (10)</td>
<td>53°09.450’N</td>
<td>00°26.050’E</td>
</tr>
</tbody>
</table>

For a copy of the Kingfisher Awareness Flyer for the Lincs Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: Lincs Offshore Wind Farm

For further information, please contact: Email: Renewables@Centrica.com OR a Fisheries Liaison Officer (FLO) will be aboard the survey vessel for the duration of the proposed works – Mob: 07831705192
London Array Wind Farm – Construction Works

The London Array Offshore Wind Farm is being constructed in the Outer Thames Estuary, it will be situated midway between the Kent and Essex coastlines, more than 20km (12 miles) from each shore. Phase one consist of 175 wind turbines, installed on two sandbanks; Long Sand and Kentish Knock and in the Knock Deep channel.

Current work activities include:

- The Sea Jack will complete mobilization and commence installing WTG's infield, starting with G03. She will be assisted by tugs Sea Golf and Bever. Whilst construction is taking place at these positions a 500m safety zone is established, and all vessels are to keep clear.
- The Wind Turbine installation vessel MPI Discovery is enroute to Esbjerg to load the next batch of WTGs. She will then return to site and install I13, H07, H04, E10, E11 and E12. While construction is taking place at these positions a 500m safety zone is established, and all vessels are to keep clear.
- The Sea Jack has continued to install WTG's infield, installing L14 & J14. She has returned to Harwich to load H12 and G11, then return to site to install these. This will leave 3 remaining to be installed by her. She will be assisted by tugs Sea Golf and Bever. Whilst construction is taking place at these positions a 500m safety zone is established, and all vessels are to keep clear. The Wind Turbine installation vessel MPI Discovery has returned to Esbjerg to load her final 6 WTGs, E04, G07, F08, F10, F11 & F12. Expected to commence installing these final 6 Monday PM 19th. While construction is taking place at these positions a 500m safety zone is established, and all vessels are to keep clear.
- Dive support vessel Gardian 7 will carry out diver operations infield during the week during which a 500m safety zone is established and vessels are to keep clear. The Dive support vessel HBC Supporter is expected on site to carry out diver operations, for various jobs related to cable protection, infield. During which a 500m safety zone is established and vessels are to keep clear.
- Windcat 4 will carry out ROV survey work at various locations. The two Cable crossings between the London Array export cable and the Kentish Flats export cable and the Britned cable, are guarded by the guard vessel Rachel S and at the Cleve Hill beach landing by guard vessel Sorrento.
- The vessel Coastal Worker and Sara Maatje 6 are continuing with cable trenching duties in the east Swale.
- The Survey Vessel Storm will carry out depth of cable surveys on all four export cables. The Rock Dumping barge Ham 601 is expected at Kentish Flats crossing for surveying and rock dumping towards end of the week. Cable Burial Vessel Sia is expected on site shortly to commence array cable burial. During these operations a 500m safety zone is established, and all vessels are to keep clear.

For a copy of the Kingfisher Awareness Flyer for the London Array Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

KINGFISHER AWARENESS FLYER: LONDON ARRAY OFFSHORE WIND FARM

For further information, please contact: Email: londonarraytraffic@dongenergy.dk, Tel: +44(0)7909414690 or +45 31727585

Lynn and Inner Dowsing Wind Farm – Notice to Mariners

Faulty Aids to Navigation on four of the Lynn and Inner Dowsing turbines have been removed for repair. The affected turbines, their co-ordinates and the nature of the fault are detailed in the table below.

<table>
<thead>
<tr>
<th>Turbine Number</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Fault</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID01</td>
<td>53°12.777’N</td>
<td>000°25.959’E</td>
<td>Faulty (East) Lantern</td>
</tr>
<tr>
<td>ID10</td>
<td>53°10.168’N</td>
<td>000°25.964’E</td>
<td>Faulty (West) Lantern</td>
</tr>
<tr>
<td>LN10</td>
<td>53°08.754’N</td>
<td>000°26.360’E</td>
<td>Faulty (East) Lantern</td>
</tr>
<tr>
<td>LN30</td>
<td>53°08.798’N</td>
<td>000°28.691’E</td>
<td>Faulty (East &amp; West) Lanterns, Fog Horn Amplifier</td>
</tr>
</tbody>
</table>

These aids will be replaced as soon as possible, and Mariners will be notified of their replacement via another Notice to Mariners in due course.

For further information, please contact: Simon Prince, Tel: 07920 273866, Email: sprince@rssmarine.co.uk; Richard Hart, Tel: 07584 514942, Email: rhart@rssmarine.co.uk
Sheringham Shoal – Survey

A benthic ecology survey will be undertaken on board the survey vessel MV Julie H. The vessel will deploy a benthic grab sampler directly to the seabed from the stern of the vessel. A video system will also be deployed from the survey vessel, and will undertake a transect on the seabed up to approximately 300m in length. In addition, a 2m beam trawl will be deployed at selected locations and will be towed for a distance of approximately 500m on the seabed.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
</table>
| EMU Limited MV Julie H Call Sign: HP3209 | 1. 53°10'52"N, 000°55'35"E  
2. 53°13’31"N, 001°10’36"E  
3. 53°04’19"N, 001°19’46"E  
4. 52°56’52"N, 001°07’16"E  
5. 53°05’54"N, 001°03’28"E | 10/11/2012 – 31/12/2012 For 3 days |

For further information, please contact: Peter Falkner, Tel: +44 (0) 2392 205500, peter.falkner@emulimited.com

Gunfleet Sands Demo Offshore Wind Farm – Construction Activities

Gunfleet Sands Demo consist of two 6 MW Siemens Wind Turbines, high voltage submarine cable between the turbines and a high voltage export cable to the shore near Clacton on Sea. Gunfleet Sands Demo is situated in the Thames Estuary off the SW corner of the existing Gunfleet Sands Offshore Wind Farm.

Construction

The construction work commenced in July and expected to be completed in February 2013. The construction work will be carried out in stages and at intervals between the above mentioned dates.

Next work expected:

- Installation of Export cable and inter array cable, the cables will be buried in the sea bed, expected to start early November depending on weather.

- Installation of the wind turbines. The turbine blades will have a clearance above sea level at LAT of 27 meters and a tip height of 144 meters above LAT. The expected date for this work is January 2013.

Survey Activity

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
</table>
| Gunfleet Demo (UK) Ltd AMT Discoverer | 1. 51°46.890N 1°08.291E  
2. 51°46.844N 1°08.718E  
3. 51°46.352N 1°08.179E  
4. 51°44.899N 1°08.313E  
5. 51°44.469N 1°09.843E  
6. 51°43.705N 1°09.952E  
7. 51°42.729N 1°09.637E  
8. 51°42.532N 1°09.341E  
9. 51°43.584N 1°09.547E  
10. 51°44.384N 1°09.437E  
11. 51°44.808N 1°09.890E  
12. 51°45.852N 1°11.839E  
13. 51°46.890N 1°10.291E | 26/10/2012 – 15/02/2013 |

For further information, please contact: Gunfleet Demo Marine, Tel: +44(0) 7880095048 email: Gfs03-mc@dongenergy.dk

Produced by The Kingfisher Information Service of Seafish, in conjunction with The Crown Estate.
Any queries please contact Kingfisher Information Services, Sea Fish Industry Authority, Humber Seafood Institute, Origin Way, Europarc, Grimsby, DN37 9TZ
email: kingfisher@seafish.co.uk website: www.kingfishercharts.org tel: +44 (0)1472 252307 fax: +44 (0)1472 268792
Hornsea Offshore Wind Farm – Survey Activities

**Buoys**
A directional wave rider (DWR) buoy is located at Schooner Field (location 7a) and will be serviced at 6 monthly intervals, and remain in place until further notice.

The DWR buoy is painted to IALA standard and is equipped with a radar reflector and an amber navigation light set to flash 5 times at 1Hz every 20 seconds. The DWR buoy is moored to the seabed through a series of rubber compliant sections at the sea surface and a plaited rope riser line throughout the water column. The result of this mooring configuration is a large excursion of the buoy about its mooring; we ask that passing vessels give the buoy a wide berth of approximately 300m.

**Location** | **Name** | **Equipment** | **Latitude** | **Longitude**
--- | --- | --- | --- | ---
7a | Schooner Field | DWR buoy | 53° 53.367'N | 01° 59.100'E

**Lost Object on Seabed - Recovered**
Please note that the seabed frame that was reported as dropped, in previous Kingfisher Bulletins, has now been recovered from the position below.

53°51.143'N 001°56.082'E

**Met Mast**
A meteorological mast is located at the position: 53°53.143'N 001°59.497'E

The primary and emergency fog horns on the Hornsea Met Mast are not functioning, be extra vigilant when navigating in adverse foggy conditions in the met mast area. SMart Wind is currently experiencing problems communicating electronically with the Hornsea Met Mast. However we can confirm that the Marine Navigation Aids are working correctly but the aviation lights are not. We would therefore like to keep the precautionary notice broadcasted on the 11/7/2012 in place until this issue is resolved.

**Surveys**
The MV Southern Star (call sign C6DZ8), a 36 m survey vessel will be conducting the bird and marine mammal survey running predetermined Zone wide transect lines spaced 6 km (3.2 Nm) apart at a speed of 10 kts and also predetermined Subzone 1 and Subzone 2 transect lines spaced 2 km (1.08 Nm) apart at a speed of 10 kts. The surveys will be undertaken monthly during daylight hours – dawn until dusk.

The vessel will also be undertaking an acoustic survey for marine mammals on both sets of predetermined transect lines (north of 53° 50’N only) and will be towing a hydrophone astern, on approximately 200m of cable (again, only during daylight hours). The hydrophone is towed at ~7m depth or less and is deployed at first light and recovered before dark on each survey day. The hydrophone is deployed before the first line is started each day so as to get the gear out and streaming before getting onto the survey line to begin the survey. The hydrophone will be retrieved before the vessel goes south of 53° 50’N on each transect line and will not be deployed or operated south of this latitude.

The direction at which the survey vessel will travel along each transect lines will vary, as will the order in which the transect lines are surveyed. At the beginning and end of each transect line, the vessel will be required to leave these fixed lines and passage to the beginning of the next line. The vessel will not recover the hydrophone at the northern end of each line; instead it will be towed to the next line to continue the survey. Where possible the vessel will remain north of 53° 50’N when waiting for daylight.

CPTs and Vibrocores, both to depths of up to 6m, will be carried out at around along the cable route. The Atlantic Surveyor (call sign: A8 AE9) has arrived on site and has begun carrying out this work.

For a copy of the Kingfisher Awareness Flyer for the Hornsea Offshore Wind Farm, please click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: Hornsea Offshore Wind Farm

For further information, please contact: Chris Jenner, Tel: 07889410553, Email: Chris.Jenner@mainstreamrp.com, OR Hornsea Zone Onshore Fisheries Liaison Officer: Nick Garside, NFFO Services Ltd, Tel: 01904 635 432, Email: nick.garside@live.co.uk
Rampion Offshore Wind Farm – Geophysical Survey

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardline Geosurvey MV Confidante ZQZ15</td>
<td>1. 50°41.220’N 000°21.860’W 2. 50°42.423’N 000°13.740’W 3. 50°40.680’N 000°04.440’W 4. 50°38.520’N 000°10.200’E 5. 50°36.720’N 000°08.840’W 6. 50°38.580’N 000°09.080’W 7. 50°37.140’N 000°15.720’W 8. 50°36.060’N 000°23.280’W</td>
<td>19/11/2012 60 Days</td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Cliff Whatrup, Email: cliff.whatrup@gardline.com

Dogger Bank Wind Farm – Installation of Meteorological Masts

Mariners are advised that the M/V Brave Tern shall begin installation of two meteorological masts within the Dogger Bank round 3 wind farm area. The locations of the two meteorological masts are within the boundaries outlined below:

<table>
<thead>
<tr>
<th>Met Mast 1 Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>55°06.0232’N</td>
<td>02°42.2509’E</td>
</tr>
<tr>
<td>55°06.0227’N</td>
<td>02°42.0478’E</td>
</tr>
<tr>
<td>55°05.9063’N</td>
<td>02°42.0487’E</td>
</tr>
<tr>
<td>55°05.9068’N</td>
<td>02°42.2518’E</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Met Mast 2 Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>54°52.0765’N</td>
<td>01°49.2986’E</td>
</tr>
<tr>
<td>54°52.0745’N</td>
<td>01°49.0950’E</td>
</tr>
<tr>
<td>54°51.9581’N</td>
<td>01°49.0984’E</td>
</tr>
<tr>
<td>54°51.9601’N</td>
<td>01°49.3002’E</td>
</tr>
</tbody>
</table>

The vessel is expected to begin operations on 14 November 2012 and work is expected to continue for a period of six weeks, until approximately end-December 2012. Any changes to the expected duration will be updated in further communications.

For further information, please contact: David Warner, Forwind Ltd, Tel: 0705750520 email: david.warner@forewind.co.uk
22 November 2012 | Issue 24

**Dogger Bank Wind Farm – Benthic Survey**

Mariners are advised that the M/V Titan Endeavour will mobilise for nearshore survey work on or around 3 November 2012. The vessel will be operating from Hartlepool Harbour.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
</table>
| Forwind Ltd M/V Titan Endeavour 2ELT9 | 1. 54°36.950N 001°03.050W  
2. 54°36.076N 001°01.463W  
3. 54°35.440N 000°59.338W  
4. 54°37.559N 000°57.825W  
5. 54°43.043N 000°51.527W  
6. 54°42.571N 000°49.257W  
7. 54°38.820N 000°34.856W  
8. 54°37.684N 000°32.129W | 02/11/2012 28 Days | Area 3 |

For further information, please contact: David Warner, Forwind Ltd, Tel: 0705750520 email: david.warner@forewind.co.uk

**Lynn and Inner Dowsing Wind Farm – Geophysical Survey**

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
</table>
| EGS Energy Wessex Explorer | 1. 53°12.819N 000°25.688E  
2. 53°12.819N 000°26.978E  
3. 53°12.016N 000°26.969E  
4. 53°12.016N 000°27.684E  
5. 53°10.125N 000°27.687E  
6. 53°10.124N 000°28.893E  
7. 53°10.102N 000°28.894E  
8. 53°09.658N 000°22.107E  
9. 53°09.767N 000°22.105E  
10. 53°10.214N 000°28.893E  
11. 53°11.357N 000°28.891E  
12. 53°09.990N 000°22.518E  
13. 53°09.835N 000°22.094E  
14. 53°10.566N 000°22.082E  
15. 53°11.875N 000°25.890E  
16. 53°11.851N 000°28.839E  
17. 53°12.541N 000°28.898E  
18. 53°12.267N 000°28.399E  
19. 53°07.504N 000°28.355E  
20. 53°07.505N 000°25.670E  
21. 53°07.807N 000°25.687E  
22. 53°09.156N 000°22.137E  
23. 53°09.288N 000°22.129E  
24. 53°09.311N 000°25.694E  
25. 53°08.768N 000°25.742E  
26. 53°09.356N 000°22.125E  
27. 53°09.504N 000°22.116E  
28. 53°08.991N 000°25.767E  
29. 53°08.852N 000°25.989E  
30. 53°09.824N 000°21.249E  
31. 53°10.066N 000°22.082E  
32. 53°08.635N 000°22.094E  
33. 53°09.737N 000°21.801E  
34. 53°08.767N 000°22.100E  
35. 53°09.658N 000°22.107E  
36. 53°09.626N 000°21.594E  
37. 53°09.580N 000°21.597E  
38. 53°09.504N 000°22.116E  
39. 53°09.356N 000°22.125E  
40. 53°09.403N 000°21.851E  
41. 53°09.288N 000°22.129E  
42. 53°09.156N 000°22.137E  
43. 53°09.441N 000°21.257E | 01/10/2012 – 31/12/2012 | Area 3 |

For further information, please contact: Simon Prince, Tel: 07920 273866, Email: sprince@rssmarine.co.uk; Richard Hart, Tel: 07584 514942, Email: rhart@rssmarine.co.uk
## Gunfleet Sands 1&2 Offshore Wind Farm – Maintenance Activity

DONG Energy Gunfleet Sands Ltd will be undertaking maintenance activity on all turbines except G07.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardline Geosurvey Ltd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MV Ivero</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Gunfleet Demo (UK) Ltd

- **Wind Demo**
- **Call Sign**: Oxsw2
- **Area Covered**:枪fleet Demo (UK) Ltd
- **Start Time Frame**: 01/10/2012 – 01/03/2013
- **Duration**: 03/10/2012 – 01/03/2013

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gunfleet Demo (UK) Ltd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wind Demo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samson B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2DYY8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Race Bank Offshore Wind Farm

- **Benthic Ecology Survey**
- **Company**: Gardline Geosurvey Ltd
- **Vessel**: MV Ivero
- **Call Sign**: Oxsw2
- **Area Covered**: Race Bank Offshore Wind Farm
- **Start Time Frame**: 26/09/2012 - 30/11/2012
- **Duration**: For 10 Weeks

For further information, please contact: Simon Prince, Tel: 07920 273866  email: Renewables@Centrica.com
Gunfleet Offshore Wind – Construction

Gunfleet Sands Demo consist of two 6 MW Siemens Wind Turbines, high voltage submarine cable between the turbines and a high voltage export cable to the shore near Clacton on Sea. Gunfleet Sands Demo is situated in the Thames Estuary off the SW corner of the existing Gunfleet Sands Offshore Wind Farm.

The two turbines will be installed in the following positions: F00 51°42.433’N 01°11.524’E G00 51°42.11’N 01°11.703’E

Gunfleet Sands Demo Offshore Wind Farm, marine works will commence for the installation of the landfall pipe PE sleeve. An 800m long PE pipe will be manoeuvred offshore and inserted into a previously drilled hole in the sea bed. The PE pipe will then be pulled ashore through the hole.

The work is planned to commence 15th September 2012, duration is expected to be up to two weeks. The position of the drill hole: 51°46.62’N 01°08.770’E

Vessels carrying out work: The work will primarily be carried out by the MPV Tessa W call sign PHNC. There will be an attending RIB for dive support and personnel transfers to the shore. Two assisting tugs will also be in attendance whilst the landfall pipe is positioned. All vessels will exhibit lights and shapes according to the ColReg.

The vessels will maintain a continuous listening watch on Ch. 16, and can be contacted at any time.

The construction work will commence July 1st 2012 and expected to be completed in February 2013. All vessels engaged in the construction project will exhibit correct lights and shape acc to the CoRRegs, all vessels will maintain a constant listening watch on VHF Ch. 16, and other VHF channels.

First vessel on site will be the Fall Pipe Rock Placement vessel “Flintstone” Expected on site early July 2012 to install a layer of “filter stones” to approximately 1 meter above seabed around the two turbine locations. Please note these positions of exposed cable and mark them on your charts:

Start 51°44.593’N 001°13.455’E
Centre 52°16.941’N 001°12.169’E
End 51°44.387’N 001°13.460’E

Start 51°48.153’N 001°12.717’E
Centre 51°48.150’N 001°12.721’E
End 51°48.147’N 001°12.725’E

All mariners should note that there is an advisory anchor exclusion zone that extends for 200 meters either side of the exposed sections of the export cable and you are requested to avoid anchoring in this area, this also includes anchors that are attached to static fishing gear.

For further information, please contact: Judy McKay, Partrac, Tel: 0141 552 3903, email: jmckay@partrac.com
Bolt Tail to Berry Head – Hydrographic Survey

Notice is hereby given that EMU Ltd will be conducting a hydrographic survey from Bolt Tail to Berry Head as detailed below.

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMU RV Discovery 2AEL8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emu Surveyor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.  50°12.030'N 003°47.110'W</td>
<td>16.  50°19.200'N 003°36.570'W</td>
<td>01/11/2012 – 10/01/2013</td>
<td></td>
</tr>
<tr>
<td>2.  50°12.630'N 003°45.570'W</td>
<td>17.  50°19.580'N 003°35.320'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.  50°11.580'N 003°43.290'W</td>
<td>18.  50°19.640'N 003°34.200'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.  50°12.460'N 003°39.410'W</td>
<td>19.  50°20.150'N 003°32.630'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.  50°13.160'N 003°37.380'W</td>
<td>20.  50°20.670'N 003°31.860'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.  50°12.850'N 003°39.230'W</td>
<td>21.  50°20.870'N 003°31.130'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.  50°12.960'N 003°39.480'W</td>
<td>22.  50°21.200'N 003°30.970'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.  50°13.150'N 003°39.480'W</td>
<td>23.  50°21.420'N 003°31.360'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.  50°13.390'N 003°38.750'W</td>
<td>24.  50°22.520'N 003°30.910'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. 50°13.600'N 003°39.270'W</td>
<td>25.  50°22.840'N 003°30.380'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. 50°14.140'N 003°39.610'W</td>
<td>26.  50°22.900'N 003°29.790'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. 50°15.410'N 003°39.370'W</td>
<td>27.  50°23.240'N 003°29.040'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. 50°16.970'N 003°38.830'W</td>
<td>28.  50°23.100'N 003°29.030'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. 50°17.810'N 003°39.290'W</td>
<td>29.  50°12.530'N 003°34.760'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. 50°18.340'N 003°37.840'W</td>
<td>30.  50°10.570'N 003°47.010'W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. 50°12.030'N 003°47.110'W</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: EMU, Tel: +44 (0)1489 860050
Gwynt y Môr Offshore Wind Farm – Construction Activities

The Gwynt y Môr Offshore Wind Farm Project is located between 15km to 20km off the coast of North Wales in the Liverpool Bay area of the Irish Sea. It is adjacent to RWE Innogy’s North Hoyle and Rhyl Flats offshore wind farms. The consented site covers an area of 124km². The water depth ranges from 12m to 28m LAT with a tidal range of 8.5m.

Progress with construction is summarised below:

- Monopiles: 60 installed, 100 remaining
- Transition pieces: 53 installed, 107 remaining
- Export cables: 1st cable pull into OSP East commenced 21st October 2012.
- Array cables: work not commenced

The work planned for the next 7 days includes:

- Stanislav Yudin will continue installation of monopiles and transition pieces supported by Smit Angola, Anglian Monarch and Union Boxer.
- Choice will remain on station as guard vessel.
- Cable barge Cable Enterprise and support vessels Vortex, Whalsa Lass and MCS Ailsa will complete export cable pull in operations at OSP East and commence cable lay operations from OSP East towards the mid line joint location.
- DP Vessel Sentinel will complete site clearance operations in the windfarm area and is now in the process of demobilisation.
- Viking Barge 3 and Viking Barge 5 will transport components to the windfarm area assisted by tugs Smit Buffalo, Smit Beluga, Union Boxer & Union Emerald on a regular basis.
- Toisa Warrior will continue grouting operations as transition pieces are installed at Gwynt y Môr Offshore Windfarm.
- DSV Terramare 1 will continue diving operations on site.
- Friederich Ernestine will start cleaning trial and grouting operations, starting at wind turbine location J7J.

Wind Farm Perimeter

<table>
<thead>
<tr>
<th>Location</th>
<th>Buoy Type</th>
<th>Position</th>
<th>Location</th>
<th>Buoy Type</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>GYM S</td>
<td>Red Can F R 2.5s</td>
<td>53°24.000N/003°37.080W</td>
<td>GYM N</td>
<td>North Cardinal VQ</td>
<td>53°29.735N/003°31.710W</td>
</tr>
<tr>
<td>GYM SW</td>
<td>Special Mark FY 2.5s</td>
<td>53°25.670N/003°39.660W</td>
<td>GYM NE</td>
<td>Special Mark FY 2.5s</td>
<td>53°26.360N/003°29.940W</td>
</tr>
<tr>
<td>GYM W</td>
<td>West Cardinal VQ(3) 15s</td>
<td>53°26.000N/003°42.120W</td>
<td>GYM E</td>
<td>East Cardinal VQ(3)15s</td>
<td>53°27.130N/003°27.017W</td>
</tr>
<tr>
<td>GYM NW</td>
<td>West Cardinal Q(0) 15s</td>
<td>53°26.000N/003°40.772W</td>
<td>GYM SE</td>
<td>Special Mark FY 2.5s</td>
<td>53°26.015N/003°32.080W</td>
</tr>
<tr>
<td>GYM NW</td>
<td>North Cardinal Q</td>
<td>53°29.670N/003°36.857W</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: Lee Cornwell, RWE npower renewables, Mob: +44 (0) 7557 319473, Email: lee.cornwell@rwe.com

West Duddon Windfarm – Survey Operations

Osiris Projects will be carrying out marine geophysical survey operations on the site of the West of Duddon Sands Windfarm and along the proposed export cable routes to Heysham. The windfarm is located in the East Irish Sea approximately 14 km from the nearest coast on Walney Island, Cumbria.

Survey operations are expected to take place between mid-October to mid-November 2012. The survey vessel Chartwell and MV Lia will be working within the following area.

1. 54° 03.4’ N 003° 36.6’ W
2. 54° 03.4’ N 002° 55.4’ W
3. 53° 55.4’ N 003° 36.6’ W
4. 53° 55.4’ N 002° 55.4’ W

For further information, please contact: Osiris Projects, Tel: 0151 328 1120 email: mick.slater@osirisprojects.co.uk
West of Duddon Sands Offshore Wind Farm – Safety Zone Application

Please note that a safety zone application has been submitted by DONG Energy for The West of Duddon Wind Farm Site. The safety zone scheme, will apply to each individual element of the windfarm during construction. The safety zone scheme will come into force on 1st May 2013. Copies of the safety zone scheme may be obtained from the following email address IANRE@dongenergy.co.uk, telephone Number: 0207 811 5200.

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 of Energy and Climate Change c/o National Infrastructure Consents Team, Area A, 3rd Floor, 3 Whitehall Place, SW1A 2AW, London UK, email: offshore.renewables@decc.gsi.gov.uk stating the name of the proposal and the nature of their representations, not later than 7th January 2013.

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, please contact: Julia Bolton, Scottishpower Renewables, Tel: +44(0)141 614 0423 email: Julia.Bolton@ScottishPower.com

Walney 1, 2 & Extension Offshore Wind Farm – Construction Activity / Consultation

DONG Energy wishes to make you aware that, as a result of recent technical investigations and consultations, an additional cable route option is now being proposed for the Project. For further information, please contact: Tel: 02078 115439 or email walneyextension@dongenergy.co.uk Web: http://www.dongenergy.com/walneyextension/downloads/pages/default.aspx.

The Jack-up ‘Excalibur’ is on site to continue with the Geotechnical survey of the proposed Walney Extension. ‘Excalibur’ will be jacked-up at the different circled positions within the area of the proposed extension and will be accompanied by the support tug ‘MTS VALIANT’ at all times.

‘Fugro Commander’ is expected to complete the CPT survey positions along the Export Cable Route either this evening or early tomorrow morning and will then transit to the proposed Burbo Bank Extension Site to carry out a further Geotechnical survey there.

While sampling ‘Fugro Commander’ will be required to remain stationary for periods of 1-2 hours and it is requested that all passing vessels, or other vessels working in the area, keep a wide berth and if possible reduce speed when passing.

‘Fugro Commander’ is currently in Liverpool changing survey equipment over for CPT’s and is expected back on site on Wednesday / Thursday to continue with survey positions along the Export Cable Route working from the proposed Wind Farm site towards the landfall position.

For a copy of the Kingfisher Awareness Flyers for the Walney Offshore Wind Farms, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

For further information, please contact: Tom Watson, Tel: 01253 875565, Mobile: 07903 173624
Buro Bank Offshore Wind Farm – Extension

DONG Energy Walney Extension (UK) Limited intends to develop and construct the Walney Extension Offshore Wind Farm - a new offshore wind farm west of Walney Island, being an extension to the existing Walney 1 & 2. The wind farm will be located approximately 19km West of Walney Island and 31km south east of the Isle of Man.

A further Geotechnical Ground Investigation which will involve two borehole samples is to be carried out at the proposed Buro Bank Extension by the Jack-up survey vessel ‘Excalibur’ as soon as this vessel completes at the proposed Walney Extention. This additional survey is expected to start on or around 24th November and is expected to last for 7 to 10 days, depending on weather.

Lat & Long positions of borehole sites
SS-A  53° 27.900’N  003° 17.600’W
SS-C  53° 29.200’N  003° 16.500’W

A 500 meter safety exclusion zone is requested around ‘Excalibur’ at all times while on site and Jacked-up and especially when the barge is afloat and being manoeuvred by the support Tug.

‘Excalibur’ will be accompanied at all times by the support tug ‘MTS Valiant’ and will move to a new position of survey without prior notification.

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

Robin Rigg Offshore Wind Farm – Hazard / Plotter Files / Operations

An anchor has been lost within the Wind Farm at position: 54°44.52’N 003°42.84’W. Several unsuccessful attempts have been made to retrieve this anchor and therefore it is likely that it will remain at this position for some time.

It has been reported that the Aviation Light on Turbine RRB05 is not working.

Turbine position : 54°45.75’N 003°41.03’W

This fault has been reported to the Northern Lighthouse Board and will be rectified as soon as weather and conditions permit proper inspection and repair. Once the light has been repaired / rectified a further notice will be issued.

A CD of the Robin Rigg layout including Inter-Array or Infield Cables as well as the Export Cable Route is now available. The disk contains fishing plotter files and is compatible with the following plotters: Litton Fish master, Sodena Turbo, Maxsea, TRAX, Transas Navi-Fish, SIS Microplot, Quodfish, TM Planner and Penta plotters.

For a copy of the Kingfisher Awareness Flyer for the Robin Rigg Offshore Wind Farm or Fishing Plotter CD, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: Robin Rigg Offshore Wind Farm
Kingfisher Fishing Plotter CD: Robin Rigg Offshore Wind Farm

For further information, please contact: Tom Watson, Tel: 01253 875565, Mob: 07903 173 624
West of Duddon Sands Offshore Wind Farm – Survey

The 15 meter ‘MV Lia’ and the 26 meter ‘MV Chartwell’ are in Fleetwood waiting on weather and as soon as conditions improve sufficiently will start the Geophysical Survey of the West Of Duddon Sands Wind Farm Site as well as the Export Cable Route.

Survey operations will involve the shallow towing along predetermined tracks within the survey areas of submerged and sensitive geophysical survey equipment at variable depths and at distances of up to 200m astern of the survey vessel.

During survey operations both vessels will be severely restricted in their ability to manoeuvre and so a wide berth is requested whenever the boats are on site.

This survey is expected to last four to six weeks, depending on weather, and once survey starts ‘MV Chartwell’ will work on a 24 hr. basis while the smaller vessel ‘MV Lia’ will work daylight hours only.

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

Shell Flats Bank – Malfunction to Navigation and Aviation Lighting

The two special marker buoys are still in situ at the 80m mast on the Shell Flats Bank and will remain in position until the Navigation lights on this mast have been repaired.

The buoys are deployed approx. 75m either side of the mast on a North and South orientation.

Positions of the two buoys :

<table>
<thead>
<tr>
<th>Buoy</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Mast Special Mark</td>
<td>53°52.477'N</td>
<td>003°12.133'W</td>
</tr>
<tr>
<td>South Mast Special Mark</td>
<td>53°52.369'N</td>
<td>003°12.133'W</td>
</tr>
</tbody>
</table>

Characteristics of the Special Marker Buoys - Flashing sequence: 0.5s ON & 2s OFF. Flash colour: Yellow

The two Metrological Masts are situated at the following positions :

<table>
<thead>
<tr>
<th>Mast</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>80m</td>
<td>53°52.423'N</td>
<td>003°12.133'W</td>
</tr>
<tr>
<td>50m</td>
<td>53°51.600'N</td>
<td>003°17.663'W</td>
</tr>
</tbody>
</table>

For further information, please contact: Tom Watson, Tel: 01253 875565, Mob: 07903 173 624
Ormonde Wind Farm – Construction / Activities

All of the turbines are now energised and are producing electricity to the National Grid. Small crew and workboat vessels will continue to be employed in the transfer of technicians to work on routine maintenance and small fault corrections as and when weather permits.

Cables
All of the Inter-Array / Infield Cables are now buried. Rock Dumping has been carried out on selected sections of the Export Cable, if anybody requires any further information on the positions of the Rock Dumping please contact me.

Export Cable – Advisory Anchor Exclusion Zone
All mariners should note that there is an advisory anchor exclusion zone that extends for 200 meters either side of the laid export power cable and you are requested to avoid anchoring in this area, this also includes anchors that are attached to static fishing gear. All vessels working at this Wind Farm site can be contacted on VHF Channels 16 & 12 for information relating to vessel movements only.

For a copy of the Kingfisher Awareness Flyer for the Ormonde Offshore Wind Farm, please contact the undersigned. Alternatively, click on the link below, or visit www.kingfishercharts.org

Kingfisher Awareness Flyer: Ormonde Offshore Wind Farm

Irish Sea Offshore Wind Farm – Survey Activities

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
<th>Area</th>
</tr>
</thead>
</table>
| Centrica MV Clupea M2F59    | 1. 53° 25.693'N 004° 28.507'W  
2. 53° 33.994'N 004° 25.665'W  
3. 53° 34.467'N 004° 00.084'W  
4. 53° 26.301'N 003° 59.991'W  
5. 53° 20.524'N 004° 06.328'W | 17th Oct – End Jan 2013 | |
Irish Sea Offshore Wind Farm – Survey Activities

<table>
<thead>
<tr>
<th>Company, Vessel &amp; Call Sign</th>
<th>Area Covered</th>
<th>Start Timeframe &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centrica MV Clupea MZFS9</td>
<td></td>
<td>22nd Oct – End Nov 2012</td>
</tr>
<tr>
<td>1. 53° 33.994’N 04° 25.665‘W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 53° 34.467’N 04° 00.084‘W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. 53° 43.186’N 04° 00.082‘W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. 53° 46.603’N 04° 25.546‘W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. 53° 39.744’N 04° 29.277‘W</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. 53° 36.017’N 04° 24.122‘W</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For further information, please contact: RSS Marine Ltd, Tel: +44(0)1723 893930, email: info@celticarray.com

Argyll – Survey Operations

Partrac will undertake survey work at the following approximate locations. Scientific equipment will be deployed over the side of the vessel, suspended on a rope.

The survey vessel Venture West will also be using an ADCP instrument and will be limited in speed until this is lifted out of the water.

<table>
<thead>
<tr>
<th>Name</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuan Sound (Luing)</td>
<td>55° 50.492'N</td>
<td>006° 05.456'W</td>
<td>12/10/12</td>
</tr>
<tr>
<td>Sound of Islay</td>
<td>56° 09.108'N</td>
<td>005° 42.482'W</td>
<td>13/10/12</td>
</tr>
<tr>
<td>Corryvreckan</td>
<td>56° 09.108'N</td>
<td>005° 42.482'W</td>
<td>14/10/12</td>
</tr>
</tbody>
</table>

For further information, please contact: Judy McKay, Partrac, Tel: 0141 552 3903, email: jmckay@partrac.com