

# Weekly Notice of Operations (WNoO)

## Beatrice Offshore Windfarm Limited Pre-Construction Operations



Issue Date: 20<sup>th</sup> February 2017

LF000005-WNO-003 BOWL Weekly Notice of Operations Rev 01

## Notice of Operations at Beatrice Offshore Wind Farm

### Work Planned for the Period 20.02.2017 to 26.02.2017

*The preconstruction work for Beatrice Offshore Wind Farm is now ongoing. We will issue regular notices on the progress and resources involved in the offshore project. In the near future the notices will be issued approximately monthly. Once the offshore construction commences, the notices will be weekly.*

*The intention is to give an overview of activities and vessels involved. Should anyone have questions regarding the operations, we kindly ask you to put them forward well in advance. If you are not the appropriate recipient of these notices, or do not wish to receive the notices in the future, please let us know by reply or email (see details in Section 1).*

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. The development site will cover an approximate area of up to 130km<sup>2</sup> and will consist of 84 7MW offshore wind turbines (with a total capacity of 588MW) and two HVAC Offshore Transformer Modules (OTM). Water depths in the area range from approximately 38m below LAT in the south of the field to 60m below LAT in the north. The generated power will be transmitted to the grid via two subsea export / transmission cables with a landfall near Portgordon to the south of the field and grid connection at Blackhillock. The transmission cables will cover a route of approximately 38 nm from the wind farm boundary back to the landfall. The Beatrice Offshore Wind Farm development area is highlighted in red below.

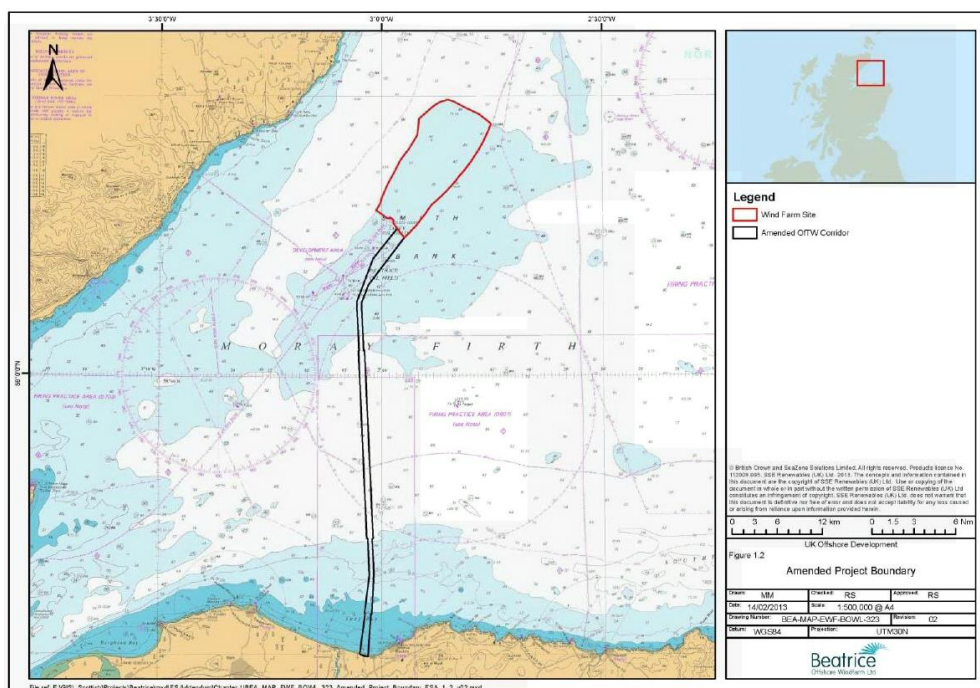


Fig 1 Beatrice Offshore Wind Farm location

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From February 2017 the Marine Coordination and Construction site office in Wick will be in place and manned.

A number of pre- construction activities are planned offshore, before the installation works commence in April 2017.

- Deployment of four special marks and four cardinal buoys to mark the construction site boundary (Detailed in this notice).
- Deployment of seabed mounted scientific equipment moorings in the Moray Firth by Aberdeen University (Detailed in this notice).
- Deployment of four wave rider buoys (Detailed in future notices).
- Boulder removal (Detailed in future notices).

### 1. Contact Details for Marine Coordination

The following contact can provide more information if required. Please note that specific queries can also be addressed to the relevant vessel or shore based representative.

<b>Telephone Number (Day Operations)</b>	+44 (0) 3302020329
<b>Emergency Contact (24/7)</b>	+44 (0) 7342 028207
<b>Email for Marine Coordinator</b>	<a href="mailto:mc.bowl@sse.com">mc.bowl@sse.com</a>
<b>Address</b>	Unit 1 Harbour Office Wick Caithness KW1 5HA

### 2. Completed Operations

#### a. Beatrice Offshore Wind Farm boundary buoy deployment

<b>Project:</b>	Beatrice Wind Farm Buoy Deployment
<b>Contractor:</b>	Sealite UK Ltd for Seaway Heavy Lifting
<b>Contract Purpose:</b>	To deploy cardinal buoys and special mark buoys to define the construction site boundaries of the Beatrice Offshore Wind Farm.
<b>Area:</b>	Beatrice Wind Farm (for detailed locations see Figure 2)
<b>Deployment Dates:</b>	February 10 <sup>th</sup> – 15 <sup>th</sup> inclusive
<b>Deployment Vessel (s):</b>	Delta Marine's 'Voe Earl' (for details see Section 4)
<b>Equipment:</b>	Trident 3000 buoys

The contractor has installed eight Sealite Trident 3000 GLA Class 2 navigation buoys on the wind farm site complete with AIS (Automatic Identification System) capability.

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### 3. Detailed locations

All coordinates are referenced to the WGS 84 Datum

Name	Coordinates	Characteristics
Beatrice OWF, Special Mark No.1	58° 12.76'N 002° 51.58'W	Yellow Special Mark 'X', Yellow Pillar, Fl Y 5s Light
Beatrice OWF, Special Mark No.2	58° 15.36'N 002° 47.66'W	Yellow Special Mark 'X', Yellow Pillar, Fl Y 5s Light
Beatrice OWF, Special Mark No.3	58° 18.22'N 002° 54.24'W	Yellow Special Mark 'X', Yellow Pillar, Fl Y 5s Light
Beatrice OWF, Special Mark No.4	58° 15.34'N 002° 57.80'W	Yellow Special Mark 'X', Yellow Pillar, Fl Y 5s Light
Beatrice OWF, East Cardinal Mark	58° 18.00'N 002° 45.11'W	East Cardinal shaped topmark, VQ(3) 5s light and AIS
Beatrice OWF, South Cardinal Mark	58° 10.43'N 002° 55.83'W	South Cardinal shaped topmark, VQ(6) +LFl 10s light and AIS
Beatrice OWF, West Cardinal Mark	58° 12.56'N 003° 01.32'W	West Cardinal shaped topmark, VQ(9) 10s light and AIS
Beatrice OWF, North Cardinal Mark	58° 20.21'N 002° 50.58'W	North Cardinal shaped topmark, QW light and AIS

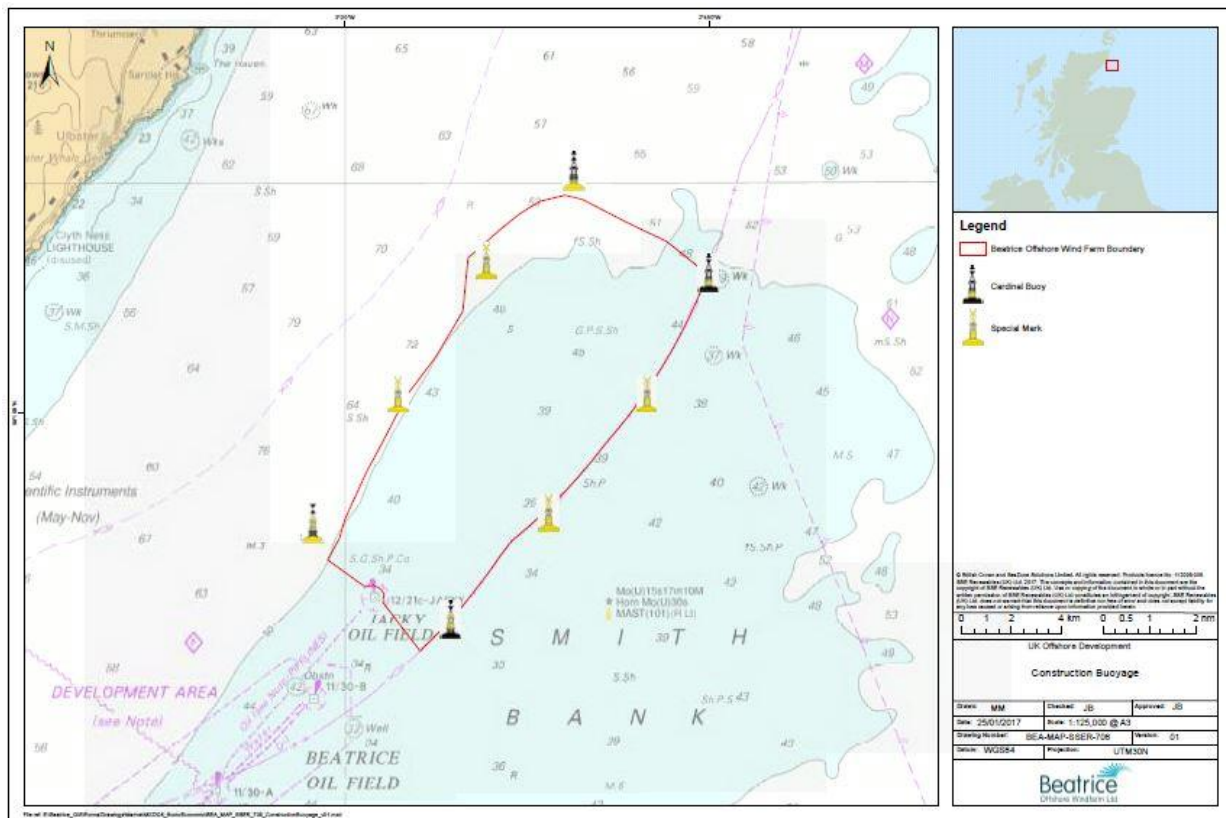


Fig 2 Construction site boundary Aids to Navigation locations

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### 4. Ongoing Operations

- a. Deployment of seabed mounted scientific equipment moorings in the Moray Firth by Aberdeen University

<b>Project:</b>	Deployment of seabed mounted scientific equipment
<b>Contractor:</b>	Moray First Marine for Aberdeen University
<b>Contract Purpose:</b>	To deploy seabed mounted scientific equipment in the Moray Firth to monitor marine mammals.
<b>Area:</b>	Moray Firth (for detailed locations see table below)
<b>Deployment Dates:</b>	February 15 <sup>th</sup> – March 15 <sup>th</sup> 2017 inclusive
<b>Deployment Vessel (s):</b>	Moray First Marine ' Coral Wind' (for details see Section 6)
<b>Equipment:</b>	Acoustic loggers with a 50 kg weight and a terminated rope riser (for details see fig 5 below)

### Detailed Locations

All coordinates are referenced to the WGS 84 Datum

Name	Provisional coordinates		Characteristics
17	57° 57.754' N	003° 31.262' W	Subsurface with acoustic release.
40	57° 48.985' N	003° 36.379' W	Subsurface with acoustic release.
41	57° 51.153' N	003° 33.032' W	Subsurface with acoustic release.
42	57° 52.326' N	003° 29.071' W	Subsurface with acoustic release.
44	57° 56.418' N	003° 21.416' W	Subsurface with acoustic release.
45	57° 57.267' N	003° 16.087' W	Subsurface with acoustic release.
46	58° 00.856' N	003° 15.377' W	Subsurface with acoustic release.
47	58° 00.808' N	003° 08.539' W	Subsurface.
48	58° 04.010' N	003° 06.924' W	Subsurface.
49	58° 04.444' N	003° 00.989' W	Subsurface.
53	58° 11.749' N	002° 45.793' W	Subsurface.
54	58° 13.523' N	002° 41.973' W	Subsurface.
55	58° 16.157' N	002° 39.638' W	Subsurface.
56	58° 18.722' N	002° 37.062' W	Subsurface.
76	58° 17.335' N	002° 50.317' W	Subsurface with transponder.
78	58° 13.572' N	002° 56.755' W	Subsurface.
82	58° 00.617' N	003° 25.689' W	Subsurface with acoustic release.
89	57° 56.050' N	003° 38.244' W	Subsurface with acoustic release.
90	58° 01.057' N	003° 36.577' W	Subsurface with acoustic release.
98	57° 54.166' N	003° 17.853' W	Subsurface with acoustic release.
99	57° 50.853' N	003° 24.442' W	Subsurface with acoustic release.
108	58° 18.995' N	002° 59.233' W	Subsurface.

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110	58° 07.659' N	002° 45.361' W	Subsurface.
143	58° 14.730' N	002° 53.069' W	Subsurface with transponder.
144	58° 14.820' N	002° 52.422' W	Subsurface with transponder.
145	58° 15.174' N	002° 52.554' W	Subsurface with transponder.
146	58° 15.234' N	002° 53.316' W	Subsurface with transponder.
147	58° 15.528' N	002° 54.240' W	Subsurface with transponder.
148	58° 15.684' N	002° 53.400' W	Subsurface with transponder.
149	58° 16.002' N	002° 52.047' W	Subsurface with transponder.
150	58° 16.656' N	002° 51.078' W	Subsurface with transponder.
151	58° 14.934' N	002° 54.900' W	Subsurface with transponder.
152	58° 14.805' N	002° 56.415' W	Subsurface with transponder.
153	58° 14.748' N	002° 57.912' W	Subsurface with transponder.
154	58° 10.770' N	002° 55.740' W	Subsurface with transponder.
155	58° 10.680' N	002° 56.550' W	Subsurface with transponder.
156	58° 10.992' N	002° 56.640' W	Subsurface with transponder.
157	58° 10.236' N	002° 54.642' W	Subsurface with transponder.
158	58° 09.739' N	002° 53.442' W	Subsurface with transponder.
159	58° 09.246' N	002° 52.224' W	Subsurface with transponder.
160	58° 17.631' N	002° 49.903' W	Subsurface.
161	58° 12.993' N	002° 55.953' W	Subsurface.
162	58° 18.200' N	002° 54.240' W	Subsurface with transponder.
163	58° 17.950' N	002° 45.000' W	Subsurface.
164	58° 12.770' N	002° 51.590' W	Subsurface with transponder.
165	58° 12.550' N	003° 01.300' W	Subsurface.
166	58° 07.800' N	002° 55.200' W	Subsurface.

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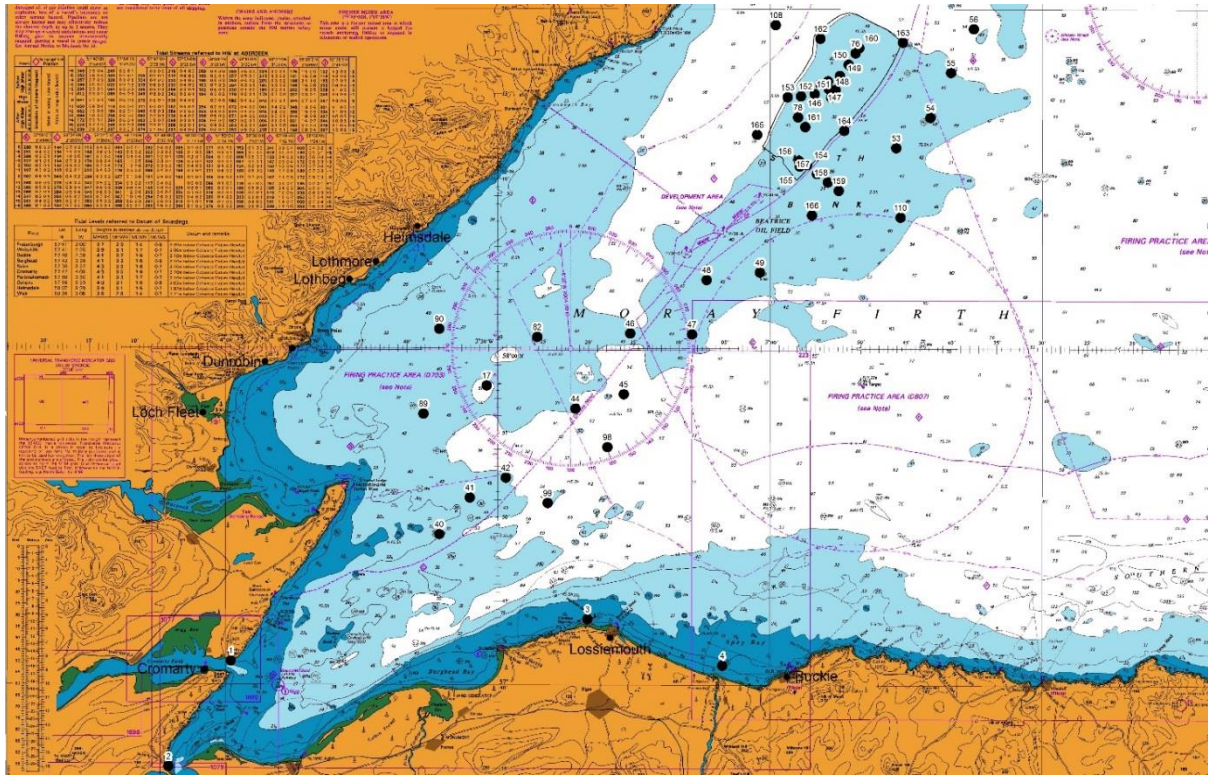


Fig 3 Mooring locations – Moray Firth, all sites

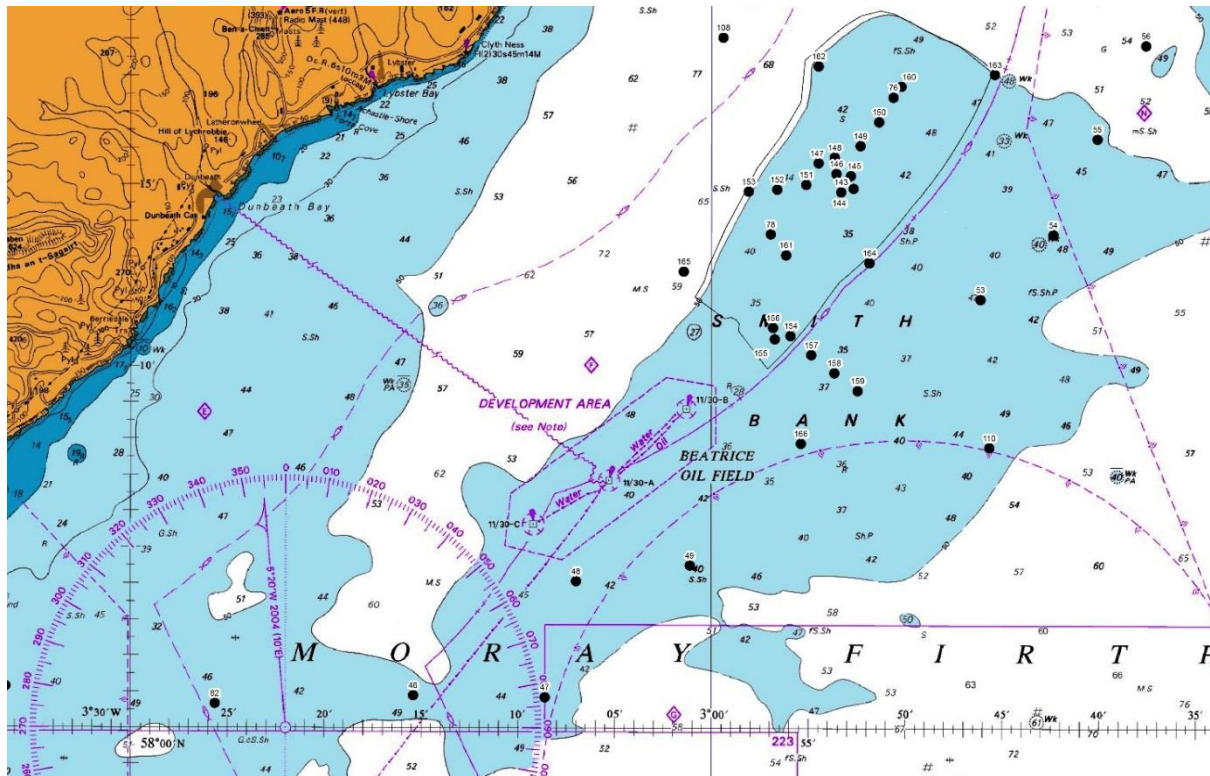
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**Fig 4** Mooring locations – detail of Smith Bank sites, Moray Firth

The moorings support sound recording equipment, and acoustic loggers that record echolocation clicks of dolphins and porpoises (see images of devices at the foot of this notice). All the above moorings will be subsurface, consisting of a 50kg weight and a terminated rope riser. The above moorings will not extend more than three metres vertically from the seabed. Thirty two of the above moorings will also be equipped with an acoustic release or transponder.

### b. Vessels on Site Associated with the Activity

Coral Wind	
<b>General Description and Dimensions:</b>	Workboat, UK MCA Cat.2, 60nm from safe haven LOA 14m, Beam 5.1m, Draft 1.2m
<b>Call Sign:</b>	2EMX8
<b>MMSI:</b>	235 086 491
<b>On Board Contact:</b>	Bill Ruck – Master 07775 802963
<b>Offshore Manager / Party Chief:</b>	Bill Ruck
<b>E-mail:</b>	<a href="mailto:bill@moraymarine.com">bill@moraymarine.com</a>
<b>Onshore Representative:</b>	Tim Candido Barton +44 (0)1381 600548 <a href="http://www.abdn.ac.uk/lighthouse">www.abdn.ac.uk/lighthouse</a>

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**Coral Wind**

Mariners are further advised that, the following existing moorings remain in place in the Moray and Cromarty Firths, as per Aberdeen University Notice to Mariners UoA/04/2016 (see also chart extracts at the foot of this notice):

All coordinates are referenced to the WGS 84 Datum

Name	As laid coordinates		Characteristics
1	57° 41.407' N	003° 58.922' W	Subsurface
2	57° 35.130' N	004° 05.870' W	Surface marked (NB50 buoy, red)
3	57° 44.083' N	003° 19.783' W	Surface marked (dhan, 12' aluminium & RADAR reflector)
4	57° 41.379' N	003° 05.623' W	Surface marked (dhan, 12' aluminium & RADAR reflector)

A further Notice to Mariners will be issued detailing the 'as laid' positions when the operations is complete. A Notice to Mariners will again be issued when the removed moorings are permanently discontinued.

For information and enquiries please contact:

Tim Candido Barton,

Lighthouse Field Station, University of Aberdeen, George St., Cromarty, Ross-shire, IV11 8YL.

+44 (0)1381 600548.

[t.r.barton@abdn.ac.uk](mailto:t.r.barton@abdn.ac.uk)



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## c. Equipment deployed

The following are examples of equipment which the above moorings will support



**Fig 5** Acoustic loggers

## 5. General Safety Advice

ALL VESSELS will exhibit appropriate lights and shapes prescribed by the International Regulations for Preventing Collisions at Sea; relative to their operations. All BOWL vessels will also transmit an AIS message.

MARINERS ARE ADVISED to navigate with caution and keep continuous watch on VHF Ch. 70/16 when navigating the area.

## 6. Dedicated Guard Vessel

Not yet in place.

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### **7. Fisheries Liaison**

Fisheries liaison associated with the activity will be co-ordinated by Brown and May Marine. For any commercial fishery queries please contact: Courtney French, telephone: +44 (0)1379 872145 and mobile: +44 (0)7702 710178.


### **8. Distribution List**

The distribution of this notice is as per email recipient's header. A central list of recipients is maintained by the Marine Coordinator; if you are not the appropriate recipient of these notices, or do not wish to receive the notices in the future, please contact us at the address included in Section 1 of this notice.

Reference to Marine Licence  
 Conditions 2.5, 2.6 and 3.1.2

## Vessel Data Matrix



No Ref	Vessel Picture	Vessel Name / Flag	Type / Function	Vessel Contact / Master's name	Company Name / Contact / contact details	Call sign / MMSI / IMO	LOA (m) Beam (m) Draft (m)	Date on Site
3		Coral Wind / UK	Workboat, UK MCA Cat.2 C-pod deployment	07775 802963 bill@moraymarine.com / Bill Ruck	Aberdeen University / Tim Candido Barton / Lighthouse Field Station, University of Aberdeen, George St., Cromarty, Ross-shire, IV11 8YL, +44 (0)1381 600548.t.r.barton@abdn.ac.uk	2EMX8 / 235086401 / N/A	14 / 5.1 / 1.2	15.02.2017
4								