

## **Marine Licence Application for Scientific Instrument Deployments**

Version 1.0

### **Marine (Scotland) Act 2010 Marine and Coastal Access Act 2009**

## Acronyms

Please note the following acronyms referred to in this application form:

<b>ADCP</b>	Acoustic Doppler Current Profiler
<b>MHWS</b>	Mean High Water Springs
<b>MPA</b>	Marine Protected Area
<b>MS-LOT</b>	Marine Scotland – Licensing Operations Team
<b>ROV</b>	Remotely Operated Vehicle
<b>SAC</b>	Special Area of Conservation
<b>SNH</b>	Scottish Natural Heritage
<b>SPA</b>	Special Protection Area
<b>SSSI</b>	Site of Special Scientific Interest
<b>WGS84</b>	World Geodetic System 1984

## Explanatory Notes

The following numbered paragraphs correspond to the questions on the application form and are intended to assist in completing the form. These explanatory notes are specific to this application and so you are advised to read these in conjunction with the Marine Scotland Guidance for Marine Licence Applicants document.

### **1. Applicant Details**

The person making the application who will be named as the licensee.

### **2. Agent Details**

Any person acting under contract (or other agreement) on behalf of any party listed as the applicant and having responsibility for the control, management or physical deposit or removal of any substance(s) or object(s).

### **3. Payment**

Indicate payment method. Cheques must be made payable to: The Scottish Government.

**Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.**

### **4. Application Type**

Indicate if the application is for a new scientific instrument deployment site or an existing scientific instrument deployment site. Provide the existing or previous consent/licence number or any other reference details and the expiry date if applicable.

### **5. Project Details**

- (a) Give a brief description of the project e.g. wave rider buoy deployment.
- (b) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 6 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**
- (c) Provide the proposed completion date of the project.
- (d) Provide the cost of the works seawards of the tidal limit of MHWS. This estimate should only cover work taking place below the tidal level of MHWS and must take into consideration the cost of materials, labour fees etc.

- (e) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) for each instrument location. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84.

**Example:** For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44"N 2°22'11"W (WGS84).

**It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.**

To supplement your application, please provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- the full extent of the works in relation to the surrounding area;
- latitude and longitude co-ordinates defining the location of the works;
- the level of MHWS;
- any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

- (f) Indicate if the project is located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.
- (g) Provide a full method statement, including schedule of work, the period of time it will be in place, its purpose and expected position (e.g. sea bed or water column).
- (h) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g. designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website: <http://gateway.snh.gov.uk/sitelink/index.jsp> and guidance on shellfish harvesting areas can be obtained from <http://www.foodstandards.gov.scot/> with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Where there are potential impacts from the works, please provide details of proposed mitigation in response to potential impacts.

## 6. Deposits

- (a) Indicate all instruments to be deployed, providing further information about the quantity and further details about the instrument to be deployed. Please include the details below depending on type of instrument:

Deployment of buoys (e.g. scientific buoy, marker buoy, associated guard buoy)

- Description
- Type
- Size

Towed equipment (e.g profiling instruments):

- Description including number of cables
- Type
- Size including length, width and depth of towed equipment (metres)

Deposits on the sea bed:

- Description including how long proposed to be deposited
- Type
- Size including full dimensions (metres)

Where the project involves a number of elements, please complete all appropriate sections.

- (b) Provide the vessel name, vessel type and name and address of all vessel operators to be used for scientific instrument deployment. If vessel details are not available at the time of application, please indicate this on the form as these details will be required prior to licence issue. Continue on a separate sheet if necessary.
- (c) Provide details of the vessel role (e.g guard or fisheries liaison), indicate if the vessel(s) will be stationary during any survey work and provide details of the length of time that the vessel(s) will be stationary.

## 7. Noise Monitoring

Under the Marine Strategy Regulations (2010), there is now a requirement to monitor loud, low to mid frequency (10Hz to 10kHz) impulsive noise. Activities where this type of noise is produced include seismic airguns, other geophysical surveys (<10kHz), pile driving, explosives and certain acoustic deterrent devices. Where noisy activity is being undertaken, you must complete an initial registration form for the noise registry which allows you to provide details on the proposed work. Completion of a 'close-out' form, which allows licensees to provide details of the actual dates and locations where the activities occurred, is also required within 12 weeks of the completion of the 'noisy' activity or, in the case of prolonged activities such as piling for harbour construction or wind farms, at quarterly intervals or after each phase of foundation installation.

These forms can be downloaded from:

<http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

**Marine licence applications will not be accepted until this form has been completed and submitted.**

## 8. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at: <http://www.gov.scot/Publications/2015/03/6517/0>

Indicate whether you have considered the project with reference to Scotland's National Marine Plan and provide details of considerations made including reference to the policies that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

## 9. Consultation

Provide details of all bodies consulted and give details of any consents issued including date of issue.

## 10. Associated Works

Indicate whether the application is associated with any other marine projects (e.g. land reclamation, marine/harbour construction works, dredging and sea disposal etc). If this is the case, provide reference/licence number for the related marine projects

# Marine Licence Application for Scientific Instrument Deployments

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## Marine (Scotland) Act 2010 Marine and Coastal Access Act 2009

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Section 54 of the Marine (Scotland) Act 2010 and Section 101 of the Marine and Coastal Access Act 2009, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act. Under the 2009 Act, application information goes on the Register unless the Secretary of State determines that its disclosure in the Register would be contrary to the interests of national security.

### Public Register

Do you consider that any of the information contained within or provided in support of this application should not be disclosed:

- (a) for reasons of national security; YES  NO
- (b) for reasons of confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES  NO

If **YES**, to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

## WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Target duration for determination is 14 weeks. Please note that missing or erroneous information in your application and complications resulting from consultation may result in the application being refused or delayed.

Marine licence applications will not be accepted unless accompanied by a cheque for the correct application fee, or if an invoice is requested, until that invoice is settled. Target timelines for determining applications do not begin until the application fee is paid.

### Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

Signature

**Amy Walker**  
Digitally signed by Amy Walker  
Date: 2021.12.14 09:42:12 Z

Date

13/12/2021

Name in BLOCK LETTERS

**Amy Walker**

### Application Check List

Please check that you provide all relevant information in support of your application, including but not limited to the following:

- Completed and signed application form
- Maps/Charts
- Co-ordinates of the boundary points of the area of harbour jurisdiction (if you are a statutory harbour authority)
- Method Statement
- Additional information e.g. photographs, consultation correspondence (if applicable)
- Noise Registry – Initial Registration Form (if applicable)
- Payment (if paying by cheque)

### 1. Applicant Details

Title: **MS**                      Initials: **A**                      Surname: **Walker**

Trading Title (if appropriate):

Address: Environment & Sustainability Unit  
Business Area Wind  
St. Andrew's House, Haugh Lane, NE46 3QQ

Name of contact (if different):

Telephone No. (inc. dialing code): **T +44 (0) 1434 611 255, M +44 (0) 7790 347 865**

Email: **amy.walker@vattenfall.com**

Statutory Harbour Authority?      YES  NO

If **YES**, please provide a list of the latitude and longitude co-ordinates (WGS84) of the boundary points of the area of harbour jurisdiction using Appendix 01 Additional Co-ordinates form if necessary.

### 2. Agent Details (if any)

Title: **n/a**                      Initials:                      Surname:

Trading Title (if appropriate):

Address:

Name of contact (if different):

Telephone No. (inc. dialing code):

Email:

### 3. Payment

Enclosed Cheque                       Invoice

Contact and address to send invoice to:

Applicant                       Agent                       Other

If **OTHER**, please provide contact details:

Title: **Mr**                      Initials: **J**                      Surname: **Love**

Address:

Email: **johnathan.love@ore.catapult.org.uk**

**4. Application Type**

Is this application for a new scientific instrument deployment site or an existing scientific instrument deployment site:

New Site  Existing Site

If an **EXISTING SITE**, please provide the consent/licence number or any other reference details and the expiry date if applicable and expiry date:

Consent/Licence Number or Other Reference Details	Expiry Date

**5. Project Details**

(a) Brief description of the project (e.g. wave rider buoy deployment):

The purpose of this project is to investigate whether curtailing the rotational speed of the turbine during significant rain events can reduce leading edge erosion of the wind turbine blades without significantly affecting the generation of energy. A rain radar instrument (Metek Micro Rain Radar Pro Dome) is to be installed on the helideck of one the turbines at European Offshore Wind Deployment Centre (EOWDC) windfarm. When the radar detects rain of certain thresholds, it will request the turbine to reduce its rotational speed. The rate of erosion at this turbine will be compared with another turbine at the windfarm through regular inspection.

It should be noted that the Applicant is applying for a Marine Licence under the 'construct, alter or improve' categorisation of licensable activities in the Marine (Scotland) Act 2010, rather than for Scientific Instrument Deployment. No deposit on the seabed or in the water column is required for the installation or operation of the Rain Radar. No directly relevant application form is currently available for this activity type.

(b) Proposed start date (**Target duration for determination of a marine licence application is 14 weeks**):

01/04/2022

(c) Proposed completion date:

01/04/2025

(d) Cost of the works seawards of the tidal limit of MHWS:

£ 6,900

(e) Location:

On the helideck of a wind turbine at EOWDC windfarm (AWF01). Coordinates of turbine provided below, and Appendix 2 shows location within the EOWDC Array.

Latitude and Longitude co-ordinates (WGS84) defining the extent of the project (continue on Appendix 01 Additional Co-ordinates form if necessary):

Latitude										Longitude										
5	7	°	1	3	.	4	2	0	' N			2	°		0	.	7	4	2	' W
		°			.				' N			°				.				' W
		°			.				' N			°				.				' W
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		°			.				' N			°				.				' W
		°			.				' N			°				.				' W

(f) Is the project located within the jurisdiction of a statutory harbour authority?

YES  NO

If **YES**, please specify statutory harbour authority:

(g) Method statement including schedule of work (continue on separate sheet if necessary):

Load radar onto vessel (Windcat 37) using dockside crane at Aberdeen Harbour

Radar secured on vessel

Transit out to wind turbine AWF01

Transfer radar onto wind turbine transition piece using davit crane

Transfer radar from transition piece to helideck using nacelle crane.

Secure radar to helideck.

Connect radar to control enclosure (inside turbine nacelle).

Commission set-up

(h) Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

The applicant has assessed the potential for any significant environmental impacts resulting from the rain radar installation & operation (K-Band frequency) by first identifying whether routes to impact exist for any receptors as a result of the installation and, if a potential route to impact is identified, then assessing potential for these effects to be significant.

The applicant has referred to the EOWDC Environmental Statement (ES) and the Supplementary Environmental Impact Statement (SEIS) submitted in 2012 (also referred to as the Addendum), and has carried out the assessment on the receptors which were presented within the wind farm consent application documents.

A tabular summary of the assessment findings is presented in the attached document. In conclusion, potential routes to impact were identified for receptors: Bats, Aviation, Ministry of Defence (firing range), Seascape, Landscape and Visual, and Electromagnetic interference.

No significant impacts were identified for Bats or Seascape, Landscape and Visual receptors. In order to identify and mitigate potential impacts on Aviation, Ministry of Defence (firing range), and Electromagnetic interference, an application to Ofcom has been submitted for an 'Innovation and Trial licence' - OfW225. Through consultation on that application any conflicts with these remaining receptors will be identified and mitigated. As per Ofcom guidance - "Technical details will be coordinated with other UK spectrum managers (for example, the Ministry of Defence and the Civil Aviation Authority) who will conduct assessments on the risk of harmful interference to existing services. An Ofcom licence would be issued only after these necessary assessments have been completed".

It should be noted that the Applicant is applying for a Marine Licence under the 'construct, alter or improve' categorisation of licensable activities in the Marine (Scotland) Act 2010, rather than for Scientific Instrument Deployment. No deposit on the seabed is required for the installation or operation of the Ran Radar. No directly relevant licence application form is currently available for the proposed activity type.

## 6. Deposits

(a) Please indicate the instruments to be deployed:

Instruments	Instrument Details (e.g description, type and size)	Quantity
Scientific Buoys (e.g waveriders or wave-powered)		
Marker Buoys		
Associated Guard Buoys		
Profiling Instruments (e.g ADCP)		
ROV		
Other (please specify)	Metek MRR-PRO (Micro Rain Radar) Dome - <a href="https://metek.de/product/mrr-pro-dome/">https://metek.de/product/mrr-pro-dome/</a> ***NOTE*** Not deployed Subsea ***NOTE*** o Weight: 88 Kg o Diameter: ~1020 mm o Height: ~1150 mm The material of the dome shell is fibreglass and the pedestal is stainless steel.	1

(b) Details of any vessel(s) undertaking deposit or removal activities (please note that a marine licence cannot be issued until the vessel details have been confirmed. Continue on a separate sheet if necessary):

Vessel	Vessel Name	Type of Vessel	Name and Address of Operator
1	Windcat 37	Crew Transfer Vessel (for transporting the radar to the turbine, no subsea activities)	Windcat Workboats Ltd 1 Battery Green Road Lowestoft, Suffolk United Kingdom NR32 1DE
2			
3			
4			
5			

(c) Further details of any vessel(s) undertaking deposit or removal activities (please note that a marine licence cannot be issued until the vessel details have been confirmed. Continue on a separate sheet if necessary):

Vessel	Vessel Role (e.g guard or fisheries liaison)	Vessel to be Stationary (include length of time to be stationary)
1	Transport of the rain radar device to the wind turbine	2-4 hours
2		
3		
4		
5		

## 7. Noise Monitoring

Will loud, low to mid frequency (10Hz to 10kHz) impulsive noise be produced by the project? YES  NO

If **YES**, which please indicate the noise generating activities and sound frequencies:

Noise Generating Activity	Sound Frequency (Hertz)
Use of Explosives	
Use of Acoustic Deterrent Devices	

Other (please describe below):	

If you have ticked **YES**, please complete the Noise Registry – Initial Registration form located at: <http://www.scotland.gov.uk/Topics/marine/science/MSInteractive/Themes/noise-reduction>

**A marine licence application will not be accepted until this form has been completed and submitted.**

## 8. Scotland's National Marine Plan

Have you considered the application with reference to Scotland's National Marine Plan?

YES  NO

If **YES**, provide details of considerations made including reference to the policies that have been considered:

The radar will be installed on a turbine within an operational offshore wind farm, and no changes to the existing usage of the marine area are proposed.

If **NO**, please provide an explanation of why you haven't considered the National Marine Plan?

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## 9. Consultation

List all bodies you have consulted and provide copies of correspondence:

Marine Scotland - MS-LOT advised that the deployment of a radar device on a turbine was considered licensable under the 'construct, alter or improve' category of licensable activities within the Marine (Scotland) Act (2010) (Part 4, section 21 (5)), and did not fall under an exemption category of scientific instrument deployment, as it is neither a deposit on the seabed or in the sea. The Applicant was therefore advised to submit a Marine Licence Application.

Ofcom - Consulted with regards to Frequency Allocation. Application for an 'Innovation and Trial licence' was subsequently submitted.

**10. Associated Works**

Provide details of other related marine projects, including reference/licence numbers (if applicable):

EOWDC Marine Licence: 00008967