

Application for Consent to conduct  
Marine Scientific Research

Date: 24<sup>th</sup> April 2018

1. General Information

1.1 Cruise name and/or number:	
WESPAS 2018	

1.2 Sponsoring Institution(s):	
Name:	Marine Institute
Address:	Rinville. Oranmore, Co. Galway, Ireland
Name of Director:	Peter Heffernan

1.3 Scientist in charge of the Project:	
Name:	Ciaran O'Donnell
Country:	Ireland
Affiliation:	Marine Institute
Address:	Rinville. Oranmore, Co. Galway, Ireland
Telephone:	+353 87 968 1954
Fax:	
Email:	Ciaran.odonnell@marine.ie
Website (for CV and photo):	www.marine.ie

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	Na
Affiliation:	
Address:	
Telephone:	
Fax:	
Email:	
Website (for CV and photo):	

2. Description of Project

2.1 Nature and objectives of the project:
<p>This survey forms part of a larger effort surveying the biomass of herring along the Malin Shelf in collaboration with Marine Scotland as well as international partners in the North Sea. Information from these surveys are used in the stock assessment process as a fishery independent measure of stock abundance.</p> <p>Details of the groups work and latest reports are provided:</p> <p><a href="http://www.ices.dk/community/groups/Pages/WGIPS.aspx">http://www.ices.dk/community/groups/Pages/WGIPS.aspx</a></p> <p>The USV component is a pilot research project and will focus on estimating the abundance of summer feeding aggregations of herring. The focal area, defined in 2017, is in the order of 200 nmi<sup>2</sup>, bounded by the western extreme of the Celtic Deep to the north and the north western Northwest Bank to the south. The autonomous vehicle will be slipway launched from the south coast of Ireland, exact location TBC, and recovered from the same site on mission completion approximately 10 days later. The vehicle will run a pre-defined transect survey, the exact boundaries of which will be determined on site. Vehicle position, progress and status will be continuously monitored via an Iridium connection. The active on-site survey will be in the order of 6 days. The vehicle will be equipped with a low power dual frequency scientific single beam</p>

echosounder (38 and 200 kHz) payload and a motion reference unit. Further details on this pilot project are available on request.

2.2 If designated as part of a larger scale project, then provide the name of the project and the Organisation responsible for coordinating the project:

HERAS international herring survey, ICES coordinated through WGIPS

2.3 Relevant previous or future research projects:

Part of a survey time series first established in 2007

2.4 Previous publications relating to the project:

<http://hdl.handle.net/10793/675>

<http://hdl.handle.net/10793/822>

<http://hdl.handle.net/10793/916>

### 3. Geographical Areas

3.1 Indicate geographical areas in which the project is to be conducted (with reference in Latitude and longitude in decimal degrees, including coordinates of cruise/track/way points/sampling stations). Please provide coordinates in a separate excel spreadsheet.

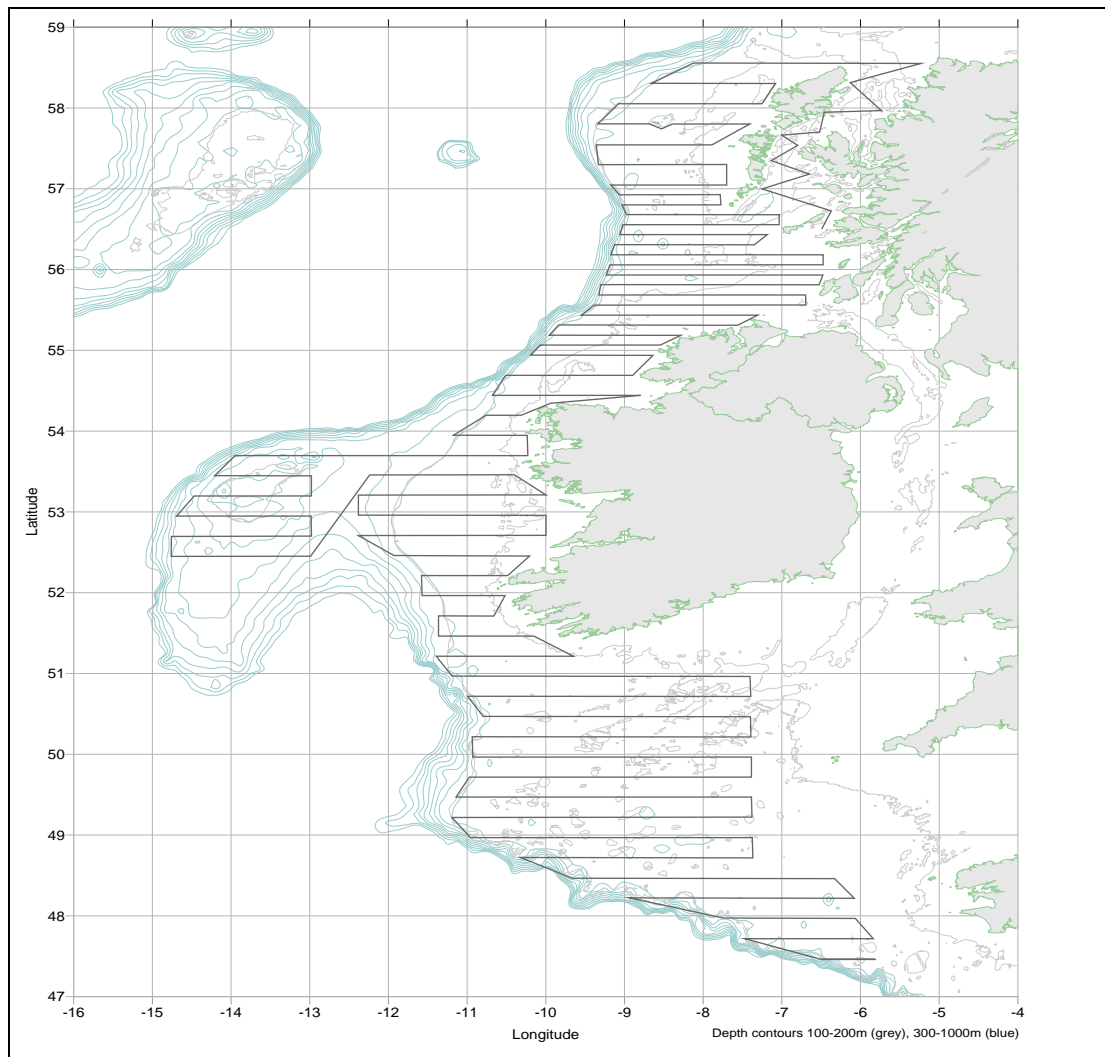
West of Scotland, Ireland and the Celtic Sea

59°N to 47°30N

Exact track waypoints as yet to be determined. Chart enclosed is of 2017 survey and will follow similar geographical coverage and transect spacing with a randomised start point (+/- 5nmi).

3.2 Attach chart(s) at an appropriate scale (1 page, high-resolution) showing the geographical

Areas of the intended work and, as far as practicable, the location and depth of sampling Stations, the tracks of survey lines, and the locations of installations and equipment.



#### 4. Methods and means to be used

4.1 Particulars of vessel:	
Name:	Celtic Explorer
Type/Class:	Multipurpose Research Vessel
Nationality (Flag State):	Irish
Identification Number (IMO/Lloyds No.):	D100 A1 ICE CLASS ID + UMS +SCM DP (CM)
Owner:	Marine Institute
Operator:	P&O Maritime Services
Overall length (meters):	65.5
Maximum draught:	5.7m
Displacement/Gross Tonnage:	2425T
Propulsion:	2 x 1530 KW, 1000Rpm, 1 x 1020 KW, 1000 Rpm
Cruising & maximum speed:	10 & 16 knots
Call sign:	EI GB
INMARSAT number and method and capability of communication (including emergency frequencies):	00353 91 423397 / 00353 91 423433 00870 763066743 00 353 87 9678520 / 00 353 86 1735500

Name of Master:	Anthony Hobin/Kenny Downing/Denis Rowan
Number of Crew:	13-15
Number of Scientists on board:	18-20 max

4.2 Particulars of Aircraft:	
Name:	Na
Make/Model:	
Nationality (flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall Length (meters):	
Propulsion:	
Cruising & Maximum speed:	
Registration No.:	
Call Sign:	
Method and capability of communication (including emergency frequencies):	
Name of Pilot:	
Number of crew:	
Number of scientists on board:	
Details of sensor packages:	
Other relevant information:	

4.3 Particulars of Autonomous Underwater Vehicle (AUV):	
Name:	Unmanned Surface Vehicle
Manufacturer and make/model:	XOCEAN XO-450
Nationality (Flag State):	Ireland
Website for diagram & Specifications:	<a href="http://www.xocean.com">www.xocean.com</a>
Owner:	XOCEAN
Operator:	XOCEAN
Overall length (meters):	4.5 m
Displacement/Gross tonnage:	900 kg
Cruising & Maximum speed:	3.5 / 7.0 knots
Range/Endurance:	1,512nm / 18 days
Method and capability of communication (including emergency frequencies):	Inmarsat satellite and Iridium SBDS satellite communications, AIS transponder
Details of sensor packages:	Simrad EK80
Other relevant information:	Contains lithium-ion battery and diesel generator

4.4 other craft in the project, including its use:
Na

4.5 Particulars of methods, full description of scientific instruments to be used (for fishing gear specify type and dimension) and location			
Types of samples and Measurements:	Methods to be used:	Instruments to be used:	To be carried out within 12nm (yes or no):
Acoustic data	ER60 Scientific Echosounder	ER60 Scientific Echosounder	Yes
Biological	Trawling	Pelagic mid-water trawl	Yes
Temperature & Salinity	Vertical cast of sensor	CTD	Yes
Marine Mammals/seabirds	Visual survey	Binoculars/camera	Yes

Passive Acoustic Monitoring of marine mammals	24hr Monitoring	Towed hydrophone	Yes
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4.6 Indicate nature and quantity of substances to be released into the marine environment:

Na

4.7 Indicate whether drilling will be carried out. If yes, please specify:

No

4.8 Indicate whether explosives will be used. If yes, please specify type and trade name, Chemical content, depth of trade class and stowage, size, depth of detonation, frequency of Detonation, and position in latitude and longitude:

No

## 5. Installations and Equipment

Details of installations and equipment (including dates of laying, servicing, method and Anticipated timeframe for recover, as far as possible exact locations and depth, and Measurements):

No

## 6. Dates

6.1 Expected dates of first entry into and final departure from the research area by the research vessel and/or other platforms:

10.06.18 to 20.06.18 (Celtic Sea)

01.07.18 to 28.07.18 (West of Scotland)

6.2 Indicate if multiple entries are expected:

Yes

## 7. Port Calls

7.1 Dates and Names of intended ports of call:

Na for UK ports

7.2 Any special logistical requirements at ports of call:

No

7.3 Name/Address/Telephone of shipping agent (if available):

Na

## 8. Participation of the representative of the coastal State

8.1 Modalities of the participation of the representative of the coastal State in the research Project:

Na

8.2 Proposed dates and ports for embarkation/disembarkation:

Na

9. Access to Data, Samples and Research Results

9.1 Expected dates of submission to coastal State of preliminary report, which should include

The expected dates of submission of the data and research results:

20.12.2018

9.2 Anticipated dates of submission to the coastal State of the final report:

20.12.2018

9.3 Proposed means for access by coastal State to data (including format) and samples:

Available on request

9.4 Proposed means to provide coastal State with assessment of data, samples and Research results:

Available on request

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples

And research results:

On request

9.6 Proposed means of making results internationally available:

Through ICES WGIPS

10. Other permits Submitted

10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):

Na

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:

Signature:



Contact information of the focal point:

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