

**APPLICATION FOR THE CONSENT TO CONDUCT MARINE SCIENTIFIC RESEARCH IN AREAS UNDER NATIONAL JURISDICTION OF THE UNITED KINGDOM**

Date: 24.08.07

**1. General information**

**1.1 Cruise name and/or number:** Northwest Herring Acoustic Survey

**1.2 Sponsoring institution:**

**Name:** Marine Institute

**Address:** Rinville  
Oranmore  
Galway  
Ireland

**Name of Chief Executive:** Dr. Peter Heffernan

**1.3 Scientist in charge of the project:**

**Name:** Ciaran O'Donnell

**Address:** Rinville  
Oranmore  
Galway  
Ireland

**Telephone:** +353 091 730 494

**Telefax:** +353 091 730 470

**1.4 Scientist(s) from UNITED KINGDOM involved in the planning of the project**

**Name(s):** NA

**Address:**

**1.5 Submitting officer:**

**Name and address:** Bernadette Ni Chonghaille  
Marine Institute  
Rinville  
Oranmore  
Galway

**Country:** Ireland

**Telephone:** +353 091 730 494

**Telefax:** +353 091 730 470

## 2. Description of project (Attach additional pages as necessary)

### 2.1 Nature of objectives of the project:

To assess the size of the spawning aggregations of blue whiting in ICES divisions VIIb, C and Via-b, using acoustic methods as a means of estimating the abundance. As part of our commitment to the EU data collection regulation and also as a means of monitoring the stock for stock assessment and management purposes, independent of commercial fishery data (ICES).

To work along a predetermined survey track and carry out single midwater pelagic trawling operations where necessary to determine the make up of insonified fish traces.

To collect biological data from fish samples.

Salinity, temperature and depth profiling along pre-determined points over course of the cruise track.

This survey forms part of an international survey with 5 participant vessels. This application relates only to the Irish vessel the RV Celtic Explorer.

### 2.2 Relevant previous or future research cruises:

This survey has been carried out annually since 2004.

### 2.3 Previously published research data relating to the project:

Marine Institute Survey Cruise Reports (internal publications): Available on request

O'Donnell et al 2004, 2005, and 2007

Mullins et al 2006

The survey data is also submitted to the annual ICES, Herring Assessment Working Group (HAWG) where it is used to form management advice for the coming year through ACFM.

## 3. Methods and means to be used

### 3.1 Particulars of vessel

**Name:** Celtic Explorer

**Nationality:** Irish

**Owner:** Marine Institute

**Overall length:** 65.5m

**Maximum draught:** 5.7m

**Net tonnage:** 727

**Propulsion:** 2 x 1530 KW, 1000Rpm. 1 x 1020 KW, 1000 Rpm

**Cruising speed:** 10 Kts

**Call sign:** EI

**Method and capability of communication --**

**Name of master:** Claran Flanigan/ Phillip Baugh

**Number of crew:** 12

**Number of scientists on board:** 8-10

**3.2 Aircraft or other craft to be used in the project:** N/A

### 3.3 Particulars of methods and scientific instruments

Types of samples and data	Methods to be used	Instruments to be used
Acoustic	Pre-determined cruise track, 24 hr data collection and processing	Keel mounted Simrad EK 60 Scientific echosounder
Hydrography	Set stations along cruise track	SeaBird CTD rosette water sampler
Biological samples	Sampling fish traces to determine composition	Single midwater pelagic trawl

**3.4 Indicate whether harmful substances will be used:** N/A

**3.5 Indicate whether drilling will be carried out:** N/A

**3.6 Indicate whether explosives will be used:** N/A

## 4. Installations and equipment

Details of installations and equipment (dates of laying, servicing, recovery, exact locations and depth): N/A

## 5. Geographical areas

**5.1 Indicate geographical areas in which the project is to be conducted (with reference in latitude and longitude):**

Along the shelf break from the area North of the 56°N outside the 200m contour and northwards to the 59°N.

**5.2 Attach chart(s) at an appropriate scale showing the geographical areas of the intended work and, as far as practicable, the positions of intended stations, the tracks of survey lines, and the locations of installations and equipment.**

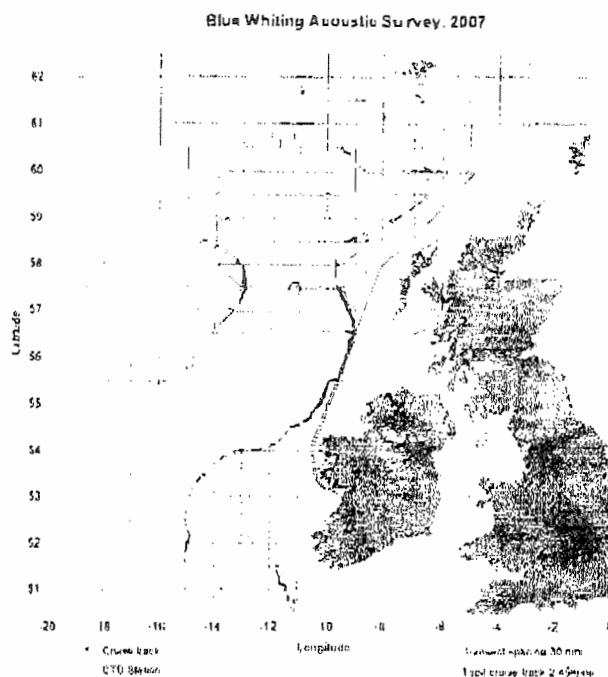


Figure 1. Proposed cruise track for 2008 survey. Exact coverage yet to be determined.

## 6. Dates

### 6.1 Expected dates of first entry into final departure from research area of the research vessel:

Provisional dates:

Start 25<sup>th</sup> March  
Finish 14<sup>th</sup> April

21 days in total.

### 6.2 Indicate if multiple entry is expected:

The survey consists of transects which run perpendicular to the shelf break. Entry into UK waters will be periodic as transects will be positioned to run East to West with the region of 56°N to 59°N

## 7. Port calls

7.1 Dates and names of intended ports of calls in UNITED KINGDOM: N/A

7.2 Any special logistical at ports of call: N/A

7.3 Names/ Address / Telephone of shipping agent (if available)

P&O Maritime

## 8. Participation

Internationally coordinated through the ICES scientific forum and will be carried out in conjunction with UK vessels from Marlab, Aberdeen.

**8.2 Proposed dates and ports for embarkation / disembarkation:**

Irish coastal ports only.

**9. Access to data, samples and research results**

**9.1 Expected dates of submission to UNITED KINGDOM preliminary reports which should include the expected dates of submission of the final results:**

AUGUST 2008

**9.2 Proposed means for access by UNITED KINGDOM to data and samples:**

Through ICES HAWG forum or through direct contact with the Cruise Leader (contact details provided)

**9.3 Proposed means to provide UNITED KINGDOM with assessment of data, samples and research results or provide assistance in their assessment or interpretation:**

Through ICES HAWG forum or through direct contact with the Cruise Leader (contact details provided)

**9.4 Proposed means of making research results internationally available:**

Through ICES HAWG forum

### 10. Scientific Equipment

COMPLETE THE FOLLOWING TABLE-  
SEPARATE PAGE FOR EACH COSTAL STATE:  
INDICATE YES OR NO

LIST SCIENTIFIC WORK BY FUNCTION Eg. MAGNETOMETRY; GRAVITY DIVING SEISMICS BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING WATER SAMPLING U/W TV MOORED INSTRUMENTS TRAWLING ECHO SOUNDING WATER SAMPLING	Echosounder (Fisheries capability)	Fisheries research within fishing limits	Fisheries and physical oceanography	DISTANCE FROM COAST		
				Coast (50m)	200m	Based on self and to shelf
WATER SAMPLING		No				
PROFILING INSTRUMENTS		No				
ABOVE WATER OPTICS AND PHOTOGRAPHY		No				

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(On behalf of the Principle Scientist)

Dated -----