Application for Consent to conduct Marine Scientific Research

Date: _30 July 2016

1. General Information

1.1 Cruise name and/or number:
FV Annie Hillina (ROS 170)

1.2 Sponsoring Institution(s):	
Name:	Marine Scotland Science, Marine Lab Aberdeen
Address:	375 Victoria Road, Aberdeen, AB11 9DB
Name of Director:	Nick Bailey

1.3 Scientist in charge of the Project:	
Name:	Susan Lusseau
Country:	Scotland
Affiliation:	Fisheries scientist
Address:	375 Victoria Road, Aberdeen, AB11 9DB
Telephone:	+44 1224295531
Fax:	
Email:	s.lusseau@marlab.ac.uk
Website (for CV and photo):	https://uk.linkedin.com/in/susan-lusseau-721a021

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:

Name:	Pelagic Advisory Council (Mrs. Verena Ohms) Scottish Pelagic Fishermen Association (Mr Steve Mackinson) Pelagic Freezer-trawler Association (Mr Martin Pastoors)
Affiliation:	Stakeholder involvement in herring survey and management herring stock in 6a
Address:	PELAC: Louis Braillelaan 80, 2719 EK Zoetermeer, Netherlands SPFA, 1 Frithside Street, Fraserburgh, Aberdeenshire AB43 PFA: Louis Braillelaan 80, 2719 EK Zoetermeer, Netherlands
Telephone:	PELAC: +31 6 28 20 73 17 SPFA: +44 7803 041 021 PFA: +31 631 901 027
Fax:	
Email:	PELAC: v.ohms@pelagic-ac.org SPFA: ian.gatt@scottishpelagic.co.uk PFA: mpastoors@pelagicfish.eu
Website (for CV and photo):	

2. Description of Project

2.1 Nature and objectives of the project:
Permission is requested for the FV Annie Hillina (ROS170, Rostock, Germany) to be able to carry out a limited number of commercial fishing hauls of herring within the UK territorial waters (12 NM) in the areas between 3.8 and 4.85 degrees West, during the period 5-11 September 2016. This fishery will be carried out in the context of the monitoring TAC for 6a North and will focus on morphometrics, genetics and catch sampling. The activities by FV Annie Hillina will be part of a wider survey into the herring stock in 6a, done by other (UK and Irish flagged) vessels. Notably, an acoustic survey in combination with commercial fishing will be carried out by FV Wiron6 (PH2200,

Plymouth). The FV Annie Hillina will be in the neighbourhood of the FV Wiron6 to collect the required samples for morphometrics, genetics and catch sampling.

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:

Susan Lusseau is the coordinator of the project in Marine Scotland Science.
Maurice Clark is the scientific coordinator in the Marine Institute in Ireland.
Both Steve Mackinson and Martin Pastoors are coordinating the survey from the industry side as the survey is done by the commercial vessels.

2.3 Relevant previous or future research projects:

A large EU funded research project has been carried out between 2003-2006 to investigate stock structure of herring stocks west of the British isles (WESTHER). One of the conclusions of this project was that the 6a North stock is distinct from the 6a South-7bc stock.

The ICES benchmark workshop on western herring (WKWEST, 2015) found that the methods used to separate herring in catches and surveys were inconclusive. ICES therefore decided to merge the two herring stocks into one assessment, while recognizing that they were still likely to be two distinct stocks.

Under the umbrella of the Pelagic Advisory Council, a research project has been initiated to apply Next Generation Sequencing techniques to 6a North herring. This method has already been successfully applied to boarfish and is also being applied to horse mackerel. This is intended to provide a baseline on which to calibrate the morphometric samples collected in the past and to allow for separation of future catches. For this to be possible, the samples will need to be collected on spawning herring that are mostly within the UK 12 nautical mile boundary during the spawning season.

2.4 Previous publications relating to the project:

Hatfield, E. M. C., Nash, R. D. M., Zimmermann, C., Schön, P. J., Kelly, C., Dickey-Collas, M., MacKenzie, K., et al. 2007. The scientific implications of the EU Project WESTHER (Q5RS–2002–01056) to the assessment and management of the herring stocks to the west of the British Isles. 50. 11 pp.

ICES. 2010. Report of the Study Group on the evaluation of assessment and management strategies of the western herring stocks (SGHERWAY), 14-18 June 2010, Dublin, Ireland. ICES C.M. 2010 / SSGSUE:08.

ICES. 2015. Report of the Benchmark Workshop on West of Scotland Herring (WKWEST), 2-6 February 2015, Dublin. ICES C.M. 2015 / ACOM:34.

ICES. 2016. Report of the Herring Assessment Working Group for the Area South of 62N (HAWG), Copenhagen, 29 March - 7 April 2016. ICES C.M. 2016 / ACOM:07.

ICES 2016. 5.3.33 Herring (Clupea harengus) in divisions 6.a and 7.b-c (west of Scotland, west of Ireland). In Report of the ICES Advisory Committee, 2016.

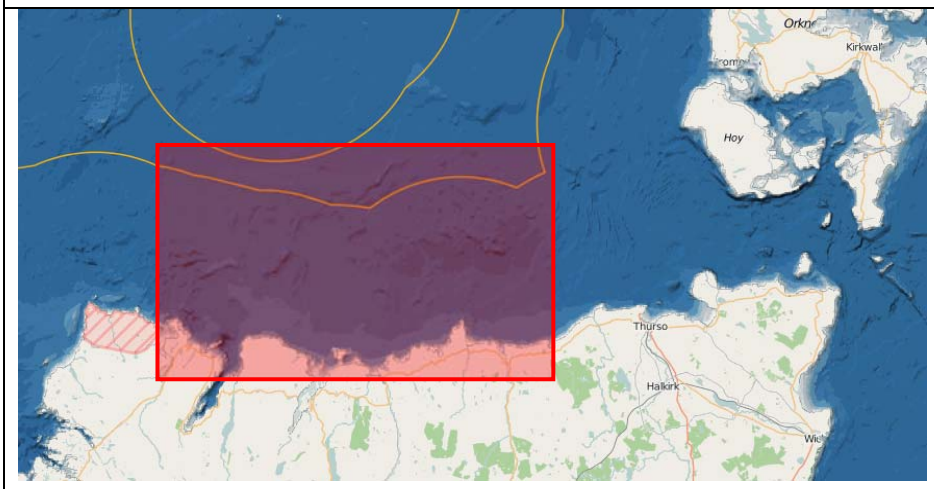
ICES 2016. 5.4.3 EU request for advice on a scientific monitoring fishery for herring in ICES divisions 6.a, 7.b, and 7.c. In Report of the ICES Advisory Committee, 2016.

3. Geographical Areas

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

UK territorial waters (12 NM) in the areas between 3.8 and 4.85 degrees West.

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.



The research by FV Annie Hillina will be carried out in conjunction with commercial fishing operations on spawning aggregations of herring. The samples will be collected where the herring are actually spawning. Because of that, no precise indications of haul positions can be made yet. It is anticipated that between 5-10 commercial fishing hauls will be taken by FV Annie Hillina within the indicated research area.

4. Methods and means to be used

4.1 Particulars of vessel:	
Name:	Annie Hillina
Type/Class:	Pelagic Factory trawler
Nationality (Flag State):	Germany (DE)
Identification Number (IMO/Lloyds No.):	8028412
Owner:	Ostbank Hochseefischerei GmbH
Operator:	Ostbank Hochseefischerei GmbH
Overall length (meters):	86.33 m
Maximum draught:	4.78 m
Displacement/Gross Tonnage:	2417
Propulsion:	2,863 KW
Cruising & maximum speed:	
Call sign:	DETD2
INMARSAT number and method and capability of communication (including emergency frequencies):	Sevsat: 0044 207 85 85 663 Iridium: 0088 163 14 15 200 Inmarsat-B: 00870764604695 E-mail: bridge@170ah.eu
Name of Master:	Henk Krijgsman
Number of Crew:	22
Number of Scientists on board:	2

4.2 Particulars of Aircraft:	
Name:	Not relevant
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:	Not relevant
Manufacturer and make/model:	
Nationality (Flag State):	
Website for diagram & Specifications:	
Owner:	

Operator:	
Overall length (meters):	
Displacement/Gross tonnage:	
Cruising & Maximum speed:	
Range/Endurance:	
Method and capability of communication (including emergency frequencies):	
Details of sensor packages:	
Other relevant information:	

4.4 other craft in the project, including its use:
Not relevant

4.5 Particulars of methods, full description of scientific instruments to be used(for fishing gear specify type and dimension and for geophysical survey the type of equipment, source levels, frequency and duty cycle to be used) and location			
Types of samples and Measurements:	Methods to be used:	Instruments to be used:	To be carried out within 12nm (yes or no):
Morphometric samples	Digitial camera setup on board of FV Annie Hilina	Digitial camera	Yes
Genetic samples	Next Generation Sequencing	Genetic tissue sampling device	Yes
Length/age/maturity samples	Traditional fisheries biology methods	Will be carried out in Marine Scotland Science facilities.	Yes

4.6 Indicate nature and quantity of any substances to be released into the marine environment:
None

4.7 Indicate whether drilling will be carried out. If yes, please specify:
None

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:
None

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):
Pelagic midwater trawl gear will be used

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:
5 September 2016
6.2 Indicate if multiple entries are expected:
No

7. Port Calls

7.1 Dates and Names of intended ports of call:
No port calls foreseen yet

7.2 Any special logistical requirements at ports of call:

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

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:
Marine Scotland Science is coordinating the morphometrics data collection within the project.

8.2 Proposed dates and ports for embarkation/disembarkation:

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:
November 2016

9.2 Anticipated dates of submission to the coastal State of the final report:
December 2016

9.3 Proposed means for access by coastal State to data (including format) and samples:
Data will be held at Marine Scotland Science.

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

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples And research results:

9.6 Proposed means of making results internationally available:
Report to be submitted to ICES Herring Assessment Working Group 2017.

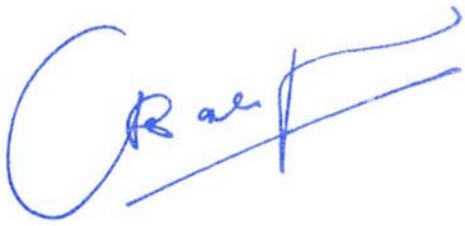
10. Other permits Submitted

10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):
none

11. List of Supporting Documentation

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

Signature:



(Gerard van Balsfoort – president of the Pelagic Freezer-trawler Association)

Contact information of the focal point:

Name: Martin Pastoors

Country: Netherlands

Affiliation: Chief Science Officer of the Pelagic Freezer-trawler Association

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