

Application for Consent to conduct  
Marine Scientific Research

Date: 04.01.2017

1. General Information

1.1 Cruise name and/or number:	
Solea SB 736	

1.2 Sponsoring Institution(s):	
Name:	Thünen Institute of Sea Fisheries
Address:	Palmaille 9, 22767 Hamburg, Germany
Name of Director:	Dr. Gerd Kraus

1.3 Scientist in charge of the Project:	
Name:	Dr. Eckhard Bethke
Country:	Germany
Affiliation:	Thünen Institute of Sea Fisheries
Address:	Palmaille 9, 22767 Hamburg, Germany
Telephone:	+49 40 38905 203
Fax:	+49 40 38905 264
Email:	<a href="mailto:eckhard.bethke@thuener.de">eckhard.bethke@thuener.de</a>
Website (for CV and photo):	<a href="https://www.thuener.de/en/sf/staff/wissenschaftliches-personal/bethke-eckhard-dr/">https://www.thuener.de/en/sf/staff/wissenschaftliches-personal/bethke-eckhard-dr/</a>

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	S. Maersk Lusseau
Affiliation:	Marine Scotland Science, Marine Laboratory
Address:	375 Victoria Road, Aberdeen, AB11 9DB, UK
Telephone:	+44 1224 876544
Fax:	+44 1225 295511
Email:	<a href="mailto:s.lusseau@marlab.ac.uk">s.lusseau@marlab.ac.uk</a>
Website (for CV and photo):	<a href="http://www.marlab.ac.uk">www.marlab.ac.uk</a>

2. Description of Project

2.1 Nature and objectives of the project:
Estimation of stock size parameters of small pelagics (herring and sprat) as part of an international, ICES-coordinated hydroacoustic survey

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:
ICES HERAS

2.3 Relevant previous or future research projects:
186th cruise of FRV "Walther Herwig III", 1997 196th cruise of FRV "Walther Herwig III", 1998 444th cruise of FRV "Solea", 1999 218th cruise of FRV "Walther Herwig III", 2000

478th cruise of FRV "Solea", 2001
240th cruise of FRV "Walther Herwig III", 2002
253rd cruise of FRV "Walther Herwig III", 2003
265th cruise of FRV "Walther Herwig III", 2004
544th cruise of FRV "Solea", 2005
559th cruise of FRV "Solea", 2006
576th cruise of FRV "Solea", 2007
591st cruise of FRV "Solea", 2008
607th cruise of FRV "Solea", 2009
624th cruise of FRV "Solea", 2010
642nd cruise of FRV "Solea", 2011
658th cruise of FRV "Solea", 2012
675th cruise of FRV "Solea", 2013
690 <sup>th</sup> cruise of FRV "Solea", 2014
706 <sup>th</sup> cruise of FRV "Solea", 2015
722 <sup>th</sup> cruise of FRV "Solea", 2016

2.4 Previous publications relating to the project:
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Refer to annual reports of the ICES Herring Assessment Working Group (HAWG) and the ICES Working Group on International Pelagic Surveys (WGIPS), available at <a href="http://www.ices.dk">www.ices.dk</a>
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### 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.
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52°00 N – 57°00 N, 02°30 W-09°00 E. Survey area depicted in attached map.
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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.
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Proposed cruise track (hydroacoustic transects) depicted in attached map
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### 4. Methods and means to be used

4.1 Particulars of vessel:
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Name:	FRV "Solea"
Type/Class:	Research Vessel
Nationality (Flag State):	Germany
Identification Number (IMO/Lloyds No.):	9314583
Owner:	Federal Republic of Germany
Operator:	Bundesanstalt für Landwirtschaft und Ernährung
Overall length (meters):	42.74
Maximum draught:	4.20
Displacement/Gross Tonnage:	638
Propulsion:	Diesel Electric
Cruising & maximum speed:	12 kn
Call sign:	DBFH
INMARSAT number and method and capability of communication (including emergency frequencies):	Tel.: +870 773 900 091 Fax: +870 783 829 945
Name of Master:	V. Koops (or deputy)
Number of Crew:	14
Number of Scientists on board:	7

4.2 Particulars of Aircraft:	
Name:	
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:	
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:

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):
Fish samples	Trawl haul	See attached drawing	Yes
Hydrography	CTD casts	Seabird CTD probe	Yes
Hydroacoustics	Echosounder	Simrad EK80	Yes

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

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 installations

#### 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:
27.06.2017-17.07.2017
6.2 Indicate if multiple entries are expected:
yes

#### 7. Port Calls

7.1 Dates and Names of intended ports of call:
Aberdeen (UK), date not fixed as depending on work schedule

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:
Co-financed by EU

8.2 Proposed dates and ports for embarkation/disembarkation:
None

#### 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:
Within 2 months

9.2 Anticipated dates of submission to the coastal State of the final report:
Within 12 months

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

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

Annual Report of ICES Herring Assessment Working Group (HAWG) and Working Group on International Pelagic Surveys (WGIPS)

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

ICES Herring Assessment Working Group (HAWG) and Working Group on International Pelagic Surveys (WGIPS)

9.6 Proposed means of making results internationally available:

ICES Herring Assessment Working Group (HAWG) and Working Group on International Pelagic Surveys (WGIPS)

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.:

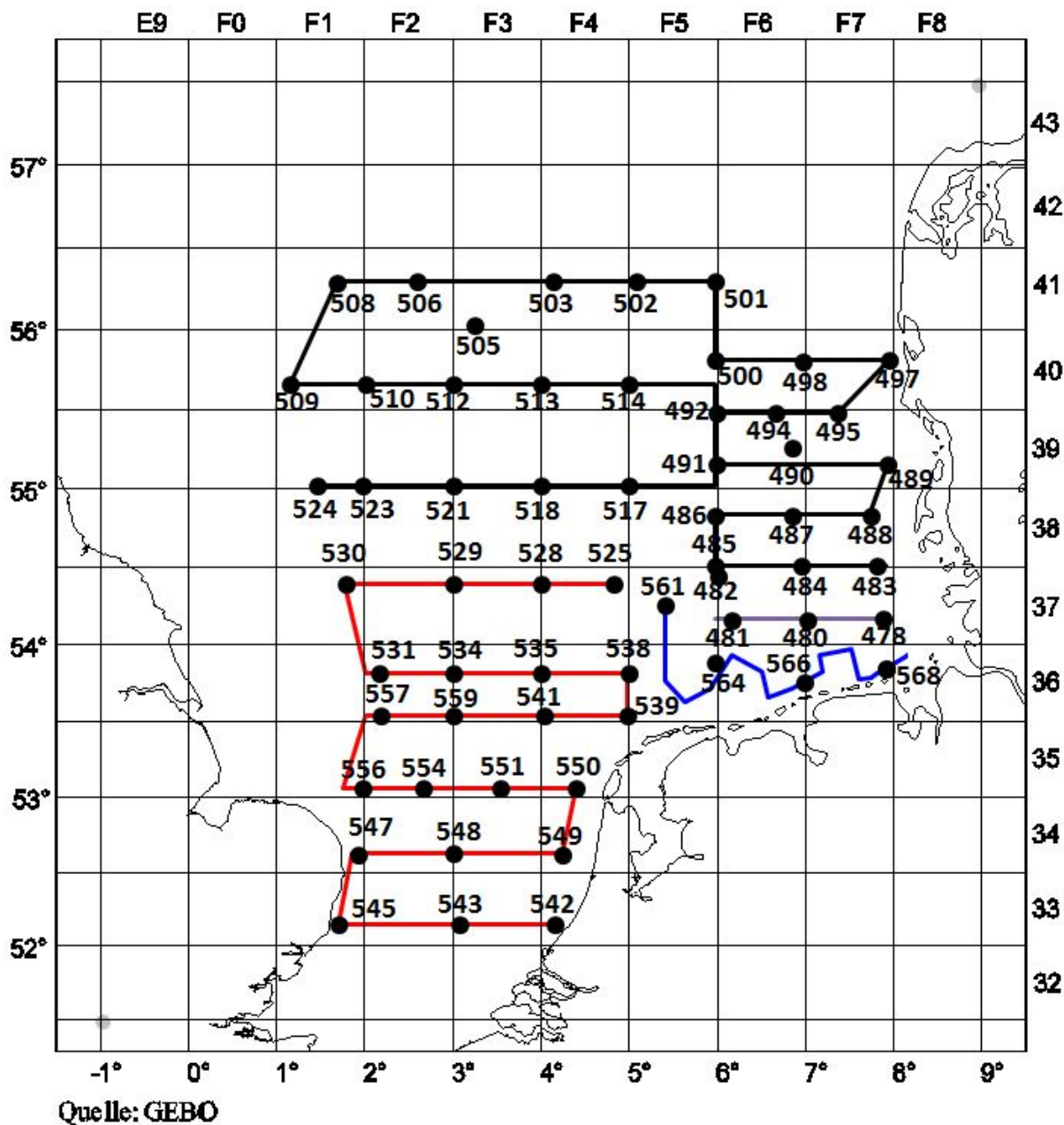
Fig 1. Map of survey area and preliminary/proposed cruise track  
Fig 2. Technical drawings of trawl gear employed

Signature:



Contact information of the focal point:

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**Fig 1:** Survey area and preliminary cruise track for FRV “Solea” cruise SB736, 2017 (approximately the same as in the year before - FRV “Solea” cruise SB722, 2016: line – hydro-acoustic transects, dots - CTD stations).

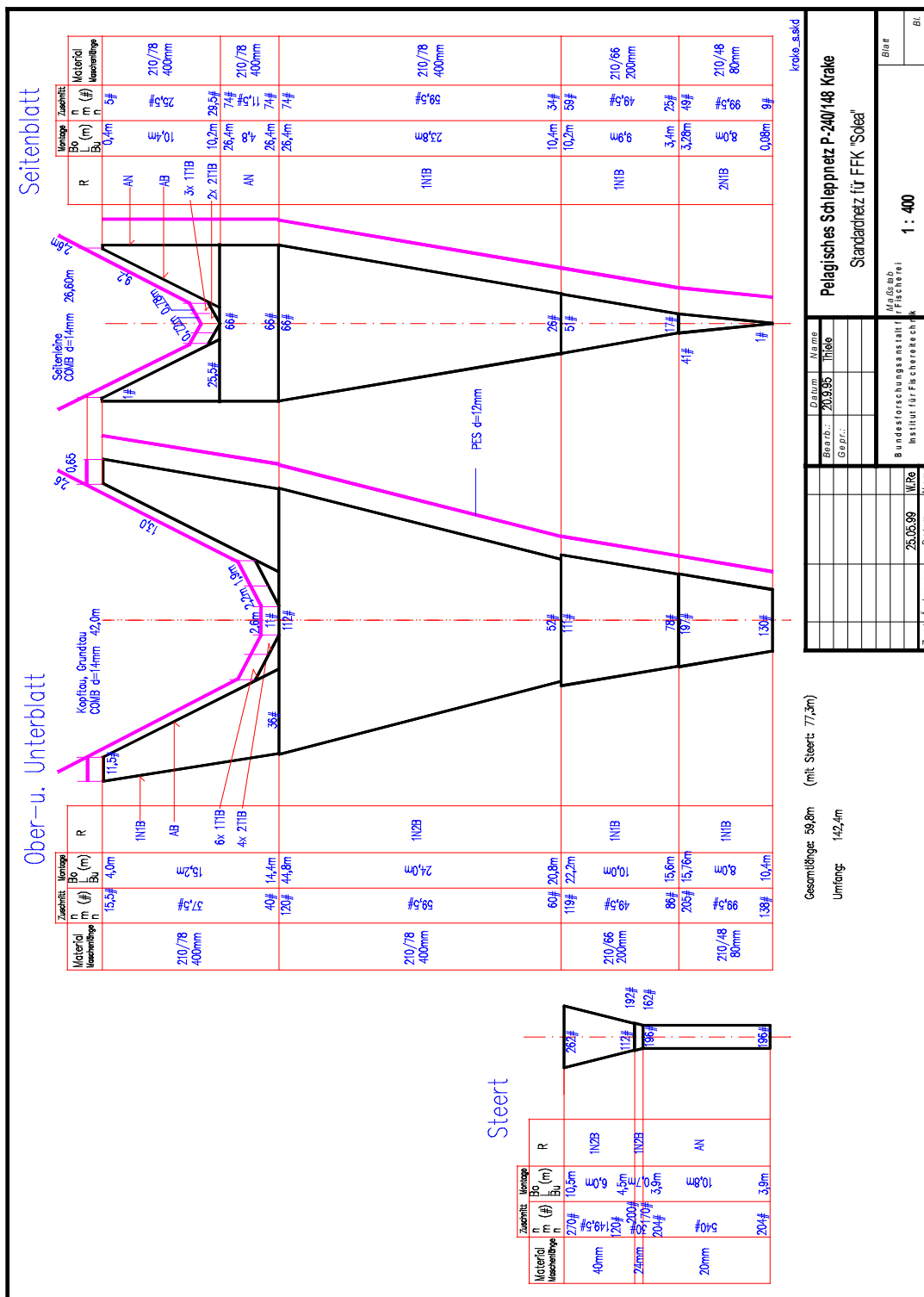


Fig 2a: Technical specifications of trawl net employed.

