#### Application for Consent to conduct Marine Scientific Research

Date: 22 January, 2016

#### 1. General Information

1.1 Cruise name and/or number:		
FRV 'Walther Herwig III'	Cruise No. 397	

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. Anne Sell
Country:	Germany
Affiliation:	Thünen-Institute of Sea Fisheries
Address:	Palmaille 9, 22767 Hamburg
Telephone:	+49 40 38905-246
Fax:	+49 40 38905-263
Email:	anne.sell @ti.bund.de
Website (for CV and photo):	www.ti.bund.de/en/starteseite/institutes/sea-
	fisheries.html

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	Finlay Burns
Affiliation:	Marine Scotland
Address:	375 Victoria Road, Aberdeen AB11 9DB
Telephone:	+44 1 224295 376
Fax:	
Email:	burnsf@marlab.ac.uk
Website (for CV and photo):	

#### 2. Description of Project

2.1 Nature and objectives of the project:

Participation in the ICES coordinated International Bottom Trawl Survey (IBTS) 2016 Q3 in the North Sea; and German Small-scale Bottom Trawl Survey (GSBTS)

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: International Bottom Trawl Survey (IBTS) 2016 Q3 under ICES coordination, and German

International Bottom Trawl Survey (IBTS) 2016 Q3 under ICES coordination, and German Small-scale Bottom Trawl Survey (GSBTS)

2.3 Relevant previous or future research projects:

Cruise is part of a standard series coordinated by ICES since the mid 1960's. International Bottom Trawl Survey Q3 since 1991. Annual national survey GSBTS since 1987.

2.4 Previous publications relating to the project:

All data are stored at ICES DATRAS and published in the framework of reports of the respective ICES working group: e.g. ICES 2014: Report of the International Bottom Trawl Survey Working Group (IBTSWG), ICES CM 2014/SSGESST:11. GSBTS: Senckenbergiana maritima (2007) 37: 13-82.

## 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.

Entire North Sea between 54° N to 62° N, particularly in those rectangles assigned to Germany by ICES (see attached map) with 1 CTD and fishery haul, and 2 types of benthos samples per each ICES rectangle. There is no particularly specified cruise track or fixed station schedule planned for the survey. All station positions as well as their consecutive order will be planned during the cruise depending on the prevailing weather. See attached map for positions of each rectangle where sampling is planned.

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.

4.1 Particulars of vessel:	
Name:	Walter Herwig III
Type/Class:	Fisheries Research Vessel (+100A5E2)
Nationality (Flag State):	Germany
Identification Number (IMO/Lloyds No.):	9048392
Owner:	Federal Republic of Germany
Operator:	Bundesanstalt für Landwirtschaft und Ernährung, Referat 524, Haubachstraße 86, 22765 Hamburg
Overall length (meters):	63,18
Maximum draught:	6,20
Displacement/Gross Tonnage:	2131 BRZ
Propulsion:	Diesel Electric
Cruising & maximum speed:	
Call sign:	DBFR
INMARSAT number and method and capability of communication (including emergency frequencies):	Inmarsat Fleet Broadband +870 773236187 VOIP +49 40 30 69 87 916 UKW channel 16
Name of Master:	Jürgen Vandrei or deputy
Number of Crew:	22
Number of Scientists on board:	12

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

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): none	
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: *none* 

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):
Fishery	Bottom Trawling	GOV	yes
Benthic epifauna	Bottom Trawling	2m- beamtrawl	yes
Benthic infauna	Grab	Van Veen grab	yes
Water	CTD casts and bottles	Seabird SBE 19	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):

none

#### 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:

First entry: 21.07.2016 Final departure: 19.08.2016

6.2 Indicate if multiple entries are expected:

yes

## 7. Port Calls

7.1 Dates and Names of intended ports of call: Possibly Lerwick, depending on schedule

7.2 Any special logistical requirements at ports of call: none

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:

Observers of coastal state are welcome provided the availability of accommodation space

8.2 Proposed dates and ports for embarkation/disembarkation:
Bremerhaven 21.07. and 19.08.2016, possibly Lerwick during max. 36 hours within ~ 8.-11.8.2016

## 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:

Generally, all data will be uploaded to ICES DATRAS for further treatment about 8 weeks after the cruise.

Furthermore:

1. Cruise summary report through official channels; English summary will be available about 4 weeks after the cruise from BSH website

http://seadata.bsh.de/csr/retrieve/dod\_index.html2. Short report in English within about three months.

3. ICES IBTS Working Group Report, by end of May 2016

9.2 Anticipated dates of submission to the coastal State of the final report: End of November, 2016

9.3 Proposed means for access by coastal State to data (including format) and samples: The official ICES data portals (DATRAS and oceanography portal) http://www.ices.dk/marine-data/data-portals/Pages/DATRAS.aspx http://www.ices.dk/marine-data/data-portals/Pages/ocean.aspx

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

Data will be available through ICES, cruise reports through official channels

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

9.6 Proposed means of making results internationally available: Results are internationally available through ICES <u>http://www.ices.dk/Pages/default.aspx</u>

10. Other permits Submitted

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

Norway, Denmark, Netherlands

11. List of Supporting Documentation

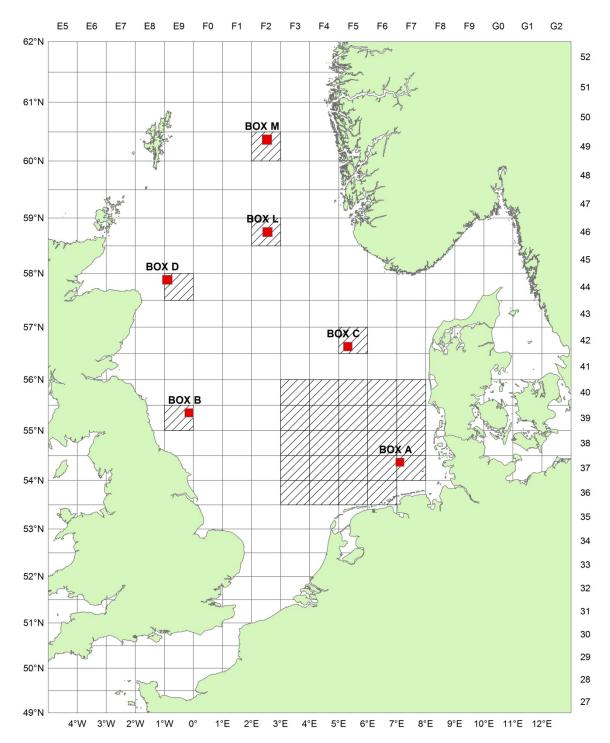
11.1 List of attachments, such as additional forms required by the coastal State, etc.: Map with position of ICES rectangles, with indication where sampling is planned

Anne Sell

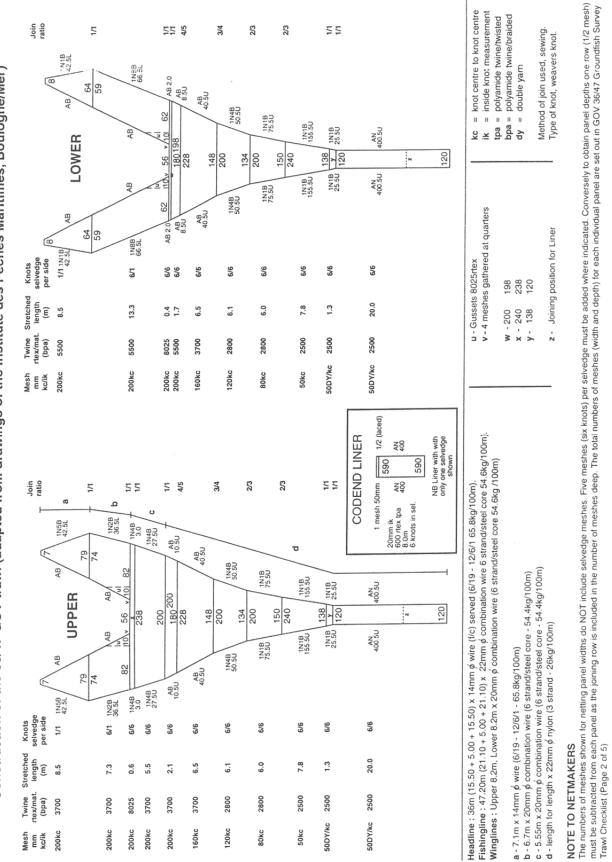
Signature:

Contact information of the focal point: Name: Dr. Anne Sell Country: Germany Affiliation: Thünen Institute of Sea Fisheries Address: Palmaille 9, 22767 Hamburg Telephone: +49 40 38905 246 Fax: +49 40 38905 263 Email: anne.sell@ti.bund.de

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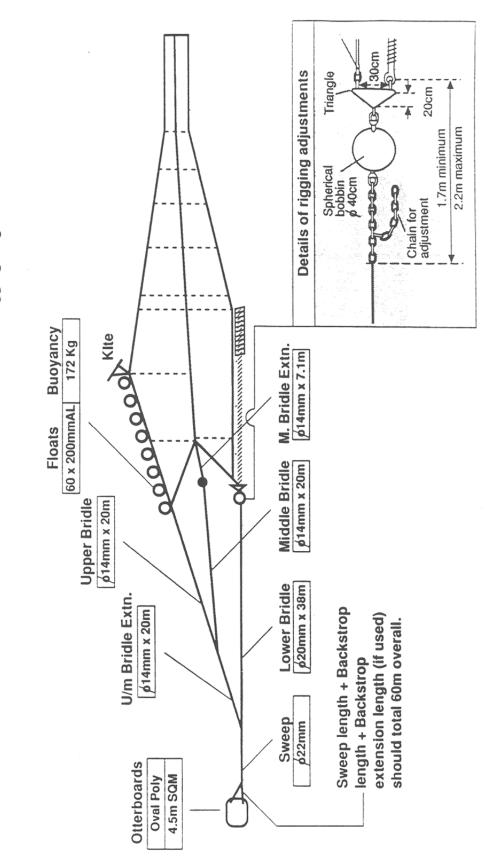
Sampling areas for cruise WH 397. Red squares: small-scale investigations (GSBTS "Boxes"); hatched area: rectangles for the International Bottom Trawl Survey (IBTS) Q3, to be sampled with one station per rectangle.



GOV standard fishing gear (trawl construction)

Construction of the 36/47 GOV trawl (adapted from drawings of the Institute des Peches Maritimes, Boulogne/Mer)

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## GOV standard fishing gear (rigging)