GB

Application for Consent to conduct
Marine Scientific Research

Date: Jan 15, 2016

1. General Information

1.1 Cruise name and/or number:	
FRV 'Walther Herwig III'	Cruise No. 396

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:	Heino O. Fock
Country:	Germany
Affiliation:	Thünen-institute of Sea Fisheries
Address:	Palmaille 9, 22767 Hamburg
Telephone:	+49 40 38905-169
Fax:	+40 40 38905-263
Email:	Heino.fock@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:	Charlotte Johnston
Affiliation:	JNCC
Address:	
Telephone:	+44 (0)1733-866815
Fax:	
Email:	Charlotte.johnston@jncc.gov.uk
Website (for CV and photo):	http://jncc.defra.gov.uk/default.aspx?page=1731

2. Description of Project

2.1 Nature and objectives of the project:
Conduct detailed monitoring of Doggerbank for Natura 2000 monitoring purposes. Technically the survey is a stratified bottom trawl survey in combination with a video transect monitoring survey.The survey is a follow-up of the initial survey conducted in 2006 (Fig. 1 a) so that results from both surveys will provide a baseline to assess the future development of the area under Natura 2000 regulations, which are currently discussed by Dogger Bank Steering Group and North Sea RAC. In addition to the initial survey in 2006, the application of video monitoring is considered in order to establish a non-destructive method for monitoring. Additionally, CTD casts to assess water mass properties and Plankton samples are taken.

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:
NATURA 2000 monitoring – Thünen Inst of Sea Fisheries

2.3 Relevant previous or future research projects:
Preliminary monitoring in 2006

2.4 Previous publications relating to the project:
Sell, A., Kröncke, I., 2013. Correlations between benthic habitats and demersal fish assemblages — A case study on the Dogger Bank (North Sea). J. Sea Res. 80, 12–24.

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.
Doggerbank area of the central North Sea, centered ca. 55.1 °N and 2.8 °E

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.
See attachment

4. Methods and means to be used

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:	12.5 kn
Call sign:	DBFR
INMARSAT number and method and capability of communication (including emergency frequencies):	+870 773 236 61 87
Name of Master:	H.-O. Janssen
Number of Crew:	21
Number of Scientists on board:	12

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):
Demersal fish	Demersal trawls, type OTB	GOV trawl (Fig. 2a) 20 mm codend mesh size, standar trawl of the IBTS International Bottom Trawl Survey	NO
Small flatfish, epibenthos	Demersal trawls, type TBB	3m-beam trawl, codend mesh size 10 mm (Fig. 2b)	NO
Bottom surface imagery	Video sledge	Video sledge trawled app. 1 m above ground	NO
Water properties	CTD, water samples	CTD casts, electronic sonde equipped with temperature, salinity and oxygen probes as well as NISKIN bottle samples	NO

4.6 Indicate nature and quantity of substances to be released into the marine environment:

-

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

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:
-

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):
-

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:
July 4, 2016 – July, 14, 2016
6.2 Indicate if multiple entries are expected:
No

7. Port Calls

7.1 Dates and Names of intended ports of call:
July 4 – Bremerhaven July 14 - Bremerhaven

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:
Cooperation within the Dogger Bank Monitoring Group UK-NLD-Ger

8.2 Proposed dates and ports for embarkation/disembarkation:
July 3, Bremerhaven July 15, Bremerhaven

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:
First report is available shortly after the end of the cruise through official channels, ca September 2016

9.2 Anticipated dates of submission to the coastal State of the final report:
Report is available, ca December 2016

9.3 Proposed means for access by coastal State to data (including format) and samples:
Cooperation within the Dogger Bank Monitoring Group UK-NLD-Ger

9.4 Proposed means to provide coastal State with assessment of data, samples and Research results:
Cooperation within the Dogger Bank Monitoring Group UK-NLD-Ger

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples And research results:
Cooperation within the Dogger Bank Monitoring Group UK-NLD-Ger

9.6 Proposed means of making results internationally available:
Cooperation within the Dogger Bank Monitoring Group UK-NLD-Ger

10. Other permits Submitted

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

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:
Fig 1a Cruise 2006 Fig 1b Planned stations cruise WH 396 Fig 2a GOV trawl Fig 2b 3-m beam trawl Station list

Signature:

Contact information of the focal point:

Name: Bundesanstalt für Landwirtschaft und Ernährung
Country: Germany
Affiliation:
Address: Haubachstr 86, Hamburg
Telephone: 0049 40 306860 534
Fax: 0049 40 306860 555
Email: fischereiforschung@ble.de

Appendix

Fig. 1a Survey area and positions of hauls conducted in 2006.

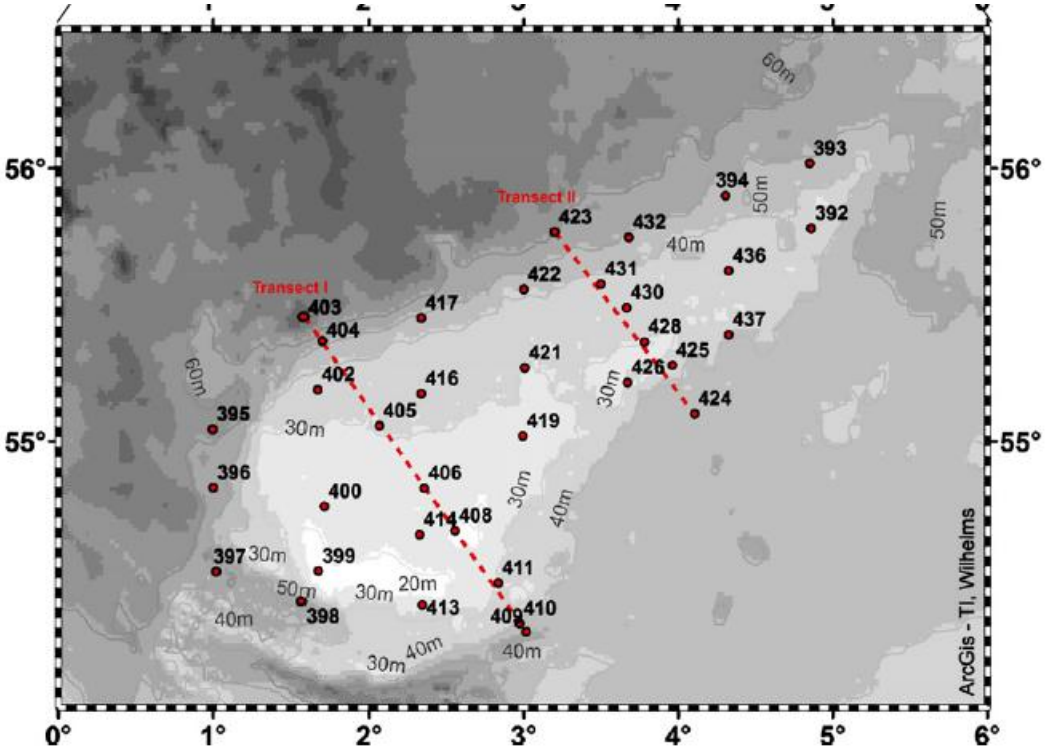


Fig. 1b Survey area and positions of hauls planned in 2016.

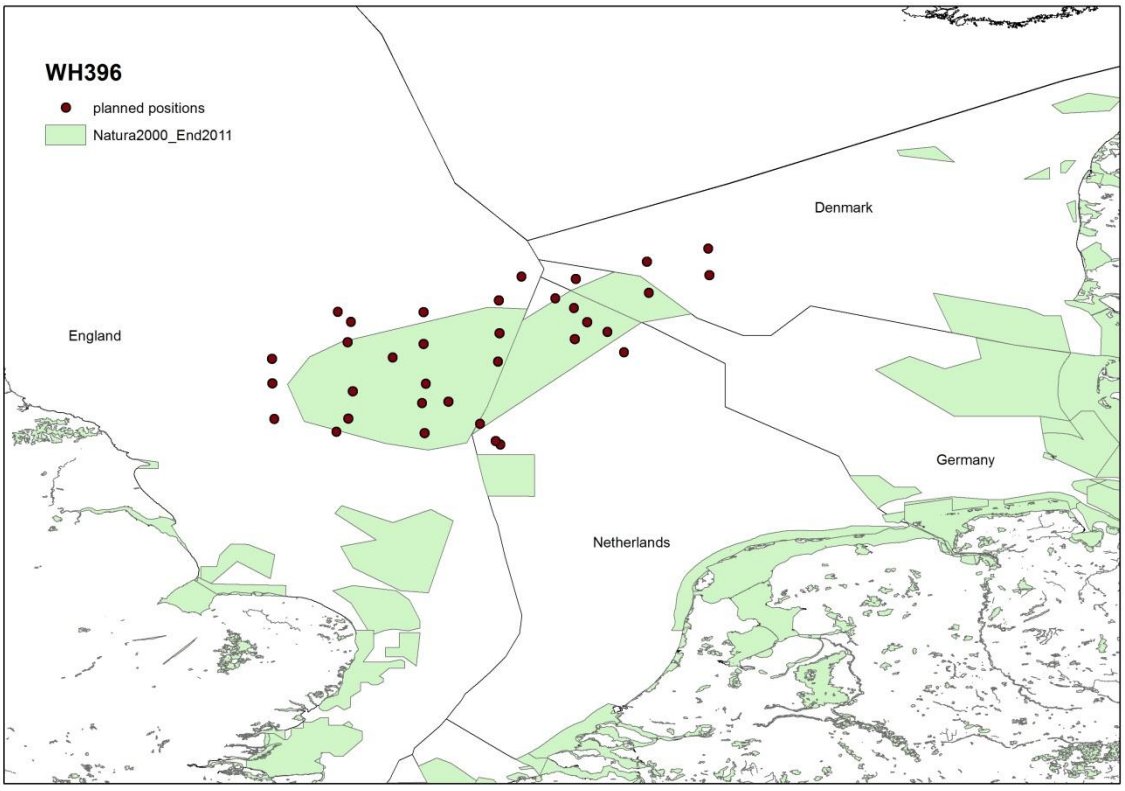
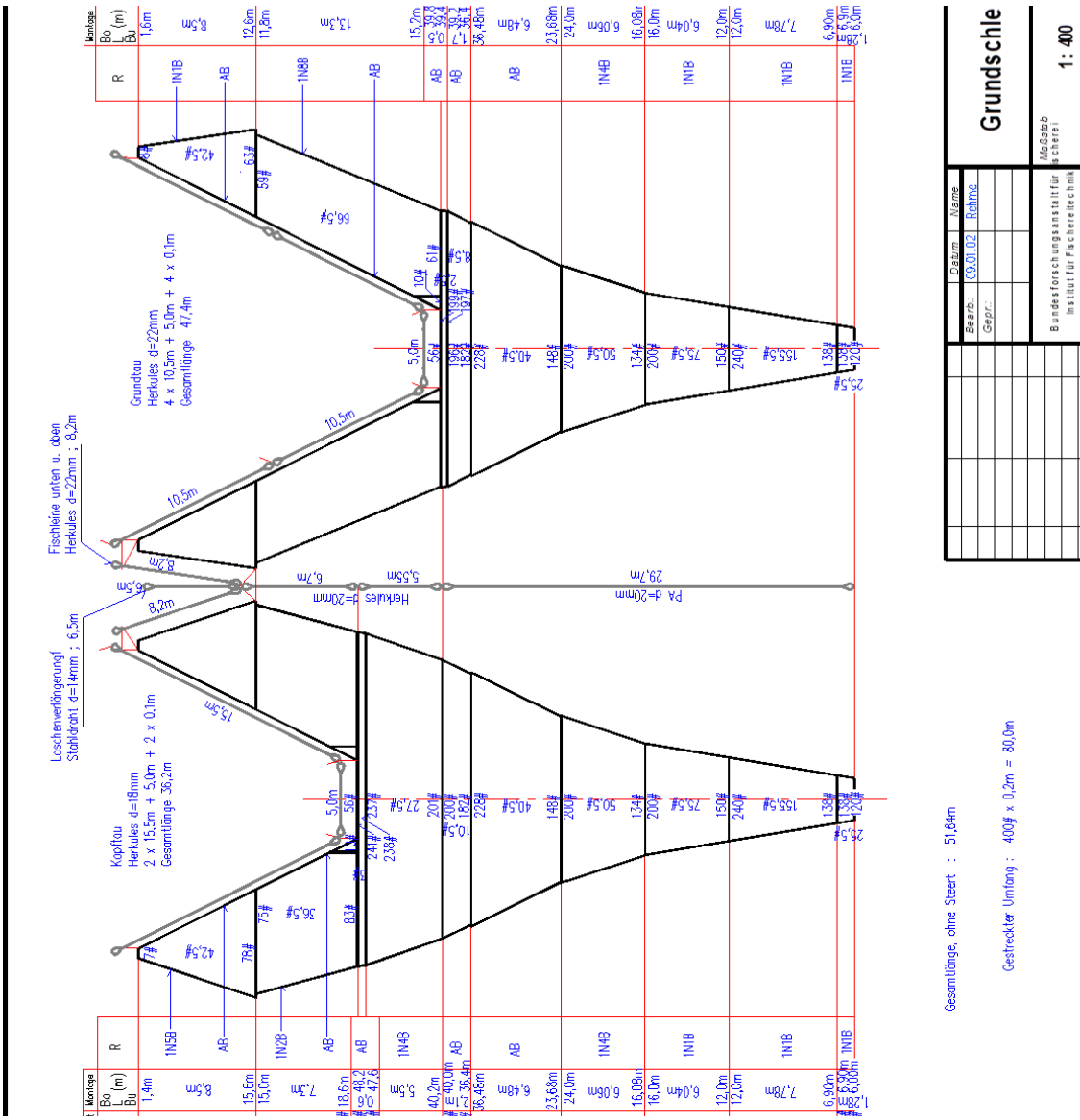
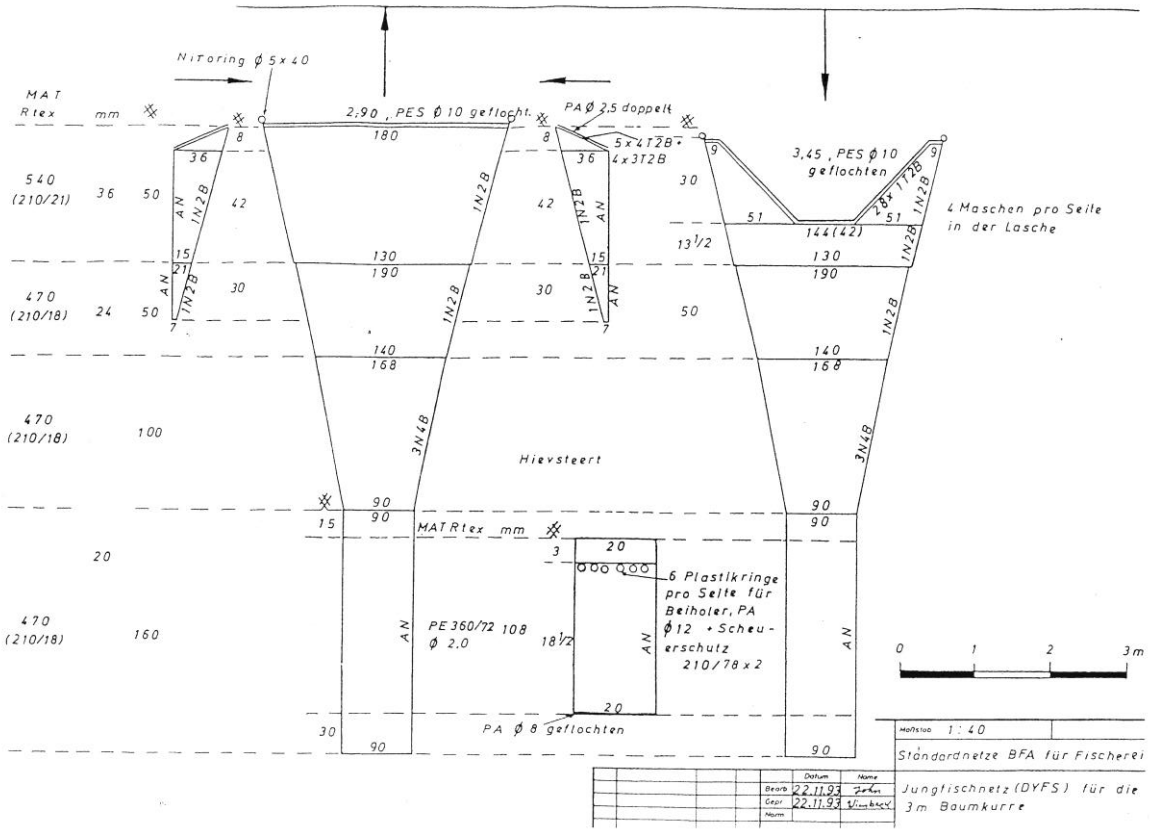


Figure 2 a


Grundschle
Gesamtlänge, ohne Steert : 51,64m
Gestreckter Umfang : 400# x 0,2m = 80,0m
Grundtau
Herkules d=22mm
4 x 10,5m + 5,0m + 4 x 0,1m
Gesamtlänge 47,4m
Fischleine unten u. oben
Herkules d=22mm ; 8,2m
Kopftau
Herkules d=18mm
2 x 15,5m + 5,0m + 2 x 0,1m
Gesamtlänge 36,2m
Loschenverlängerung!
Stahldraht d=14mm ; 6,5m
Herkules d=20mm
PA d=20mm
29,7m
5,5m
5,0m
10,5m
15,5m
8,2m
6,5m
6,7m


Nitoring ∅ 5x40
2,90 , PES ∅ 10 geflocht.
PA ∅ 3,5 doppelt
3,45 , PES ∅ 10 geflochten
4 Maschen pro Seite in der Lasche
6 Plastikringe pro Seite für Beiholer, PA ∅12 + Scheuerschutz 210/78 x 2
PE 360/72 108 ∅ 2,0
PA ∅ 8 geflochten
Hievsteert
MAT Rtex mm
0 1 2 3m
Maßstab 1:40
Standardnetze BFA für Fischerei
Jungfischnetz (DYFS) für die 3m Baumkurre

2b1

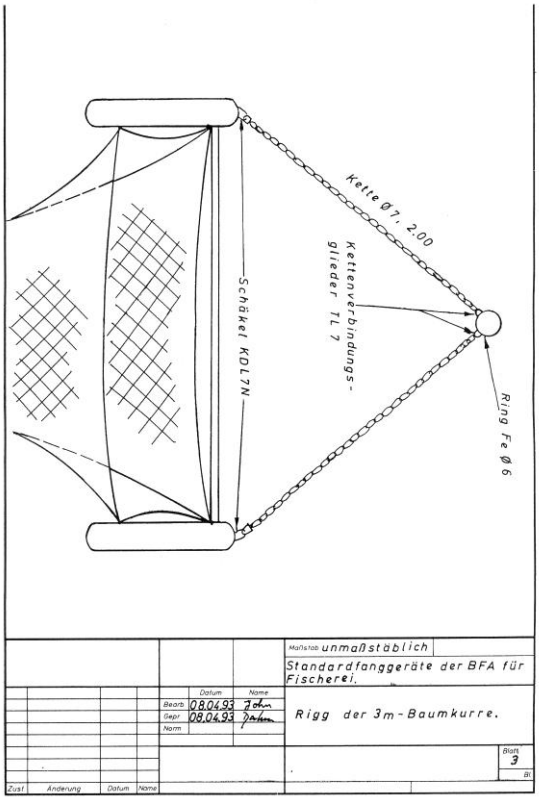


Fig 2b2

Station list

Haul number	GBSTART N°	GLSTART E°
1	55.7805	4.86017
2	56.01667	4.85017
3	55.9005	4.30617
4	55.04417	0.999
5	54.82667	1.00233
6	54.51433	1.02033
7	54.40233	1.56967
8	54.51617	1.67233
9	54.75717	1.7115
10	55.19033	1.6675
11	55.4585	1.58117
12	55.36917	1.6975
13	55.05683	2.06633
14	54.825	2.358
15	54.66733	2.5565
16	54.288	3.017
17	54.3185	2.97317
18	54.47167	2.83633
19	54.388	2.34533
20	54.65283	2.326
21	55.1755	2.33817

22	55.45417	2.33783
23	55.019	2.994
24	55.2705	3.00833
25	55.55833	3.00117
26	55.76783	3.201
27	55.1015	4.10567
28	55.2805	3.96183
29	55.217	3.67133
30	55.366	3.781
31	55.49233	3.66633
32	55.57833	3.5005
33	55.74867	3.68083
34	55.6265	4.327