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To whom it may concern

Institute of Sea Fisheries

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Date 2019-01-03

Notification FRV "Walther Herwig III" cruise no. 426, 21/03 – 26/04/2019, German part of the International Mackerel and Horse Mackerel Egg Survey (MEGS)

Repair and maintenance work on FRV "Walther Herwig III", Advice of amendment

Dear Sir or Madam,

I would like to inform you that there will be changes to the planned research cruise by the German fishery research vessel "FRV Walter Herwig III" (Cruise No. 426, period 21st March – 26th April 2019). Research activities were planned in the territorial waters of Ireland, France and the United Kingdom.

Due to urgent repair and maintenance work on the "FRV Walter Herwig III", the planned cruise with the ship will be cancelled. Instead, we are chartering the Danish research vessel "Dana". However, due to RV Dana's survey time schedule there will be following changes:

- cruise will be shortened to 33 days
- cruise will start one week later (28/03) until 30/04/2019
- the intended port call will be a week later (Coph or Brest app. 12, 13 or 14/4/2019)

The Johann Heinrich von Thünen Institute, Federal Research Institute for Rural Areas, Forestry and Fisheries – Thünen Institute in brief – consists of 14 specialized institutes that carry out research and provide policy advice in the fields of economy, ecology and technology. President: Prof. Dr. Folkhard Isermeyer

there will be no major changes with regards to the activities in the waters of Ireland, France and UK, other than a possible reduction of work stations due to the shortened survey time.

Further information with respect to the chartered vessel (general data of RV "Dana") are given in the appendix document.

I would also like to take the opportunity to apologize for any inconvenience these changes may cause to you.

Kind regards

1 m

Jens Ulleweit

Particulars of vessel:							
Name:	Dana						
Type/Class:	Fisheries Research Vessel (+100A5E2)						
Nationality (Flag State):	Denmark						
Identification Number (IMO/Lloyds No.):	7912680						
Owner:	Denmark						
Operator:	DTU Aqua (National Institute of Aquatic Resources Kemitorvet, Building 202, DK-2800						
Overall law oth (masters):	Kgs. Lyngby 78.43						
Overall length (meters):	6.30						
Maximum draught:	2483 BRZ						
Displacement/Gross Tonnage:							
Propulsion:	Diesel						
Cruising & maximum speed:	11 Kn / 14 Kn						
Call sign:	OXBH						
INMARSAT number and method and capability of communication (including emergency frequencies):	Inmarsat Fleet Broadband +871 32 19 384 20 UKW channel 16						
Name of Master:	Jesper Sandager						
Number of Crew:	20						
Number of Scientists on board:	10 - 12						

Application for Consent to conduct Marine Scientific Research

Date: 07/09/2018

1. General Information

1.1 Cruise name and/or number: 426	

1.2 Sponsoring Institution(s):						
Name: Thünen Institute of Sea Fisheries,						
	Federal Research Institute					
Address:	Herwigstr. 31, 27572 Bremerhaven, Germany					
Name of Director:	Dr. Gerd Kraus					

1.3 Scientist in charge of the Project:					
Name:	Dipl.Biol. Jens Ulleweit				
Country:	Germany				
Affiliation:	Thünen Institute of Sea Fisheries				
Address:	Herwigstr. 31, 27572 Bremerhaven Germany				
Telephone:	+49 471 94460 117				
Fax:	+49 471 94460 099				
Email:	jens.ulleweit@thuenen.de				
Website (for CV and photo):	https://www.thuenen.de/de/sf/personal/wissenschaftliches-				
	personal/ulleweit-jens-dipl-biol/				

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:								
Name:	Hayden Close							
Affiliation:	CEFAS							
Address:	Pakefield Rd, Lowestoft, Suffolk NR33 0HT							
Telephone:	+44 1502 562244							
Fax:								
Email:	Hayden Close CEFAS Pakefield Rd, Lowestoft, Suffolk NR33 0HT +44 1502 562244 Hayden.close@cefas.co.uk involved in the planning of the project: Finlay Burns Marine Science Scotland 375 Victoria Rd, Aberdeen, AB11 9DB +44 131 244 2500							
Website (for CV and photo):								
1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:								
Name: Finlay Burns								
Affiliation:								
Address:	375 Victoria Rd, Aberdeen, AB11 9DB							
Telephone:	+44 131 244 2500							
Fax:								
Email:	burnsf@marlab.ac.uk							
Website (for CV and photo):								

2. Description of Project

2.1 Nature and objectives of the project:

The cruise is part of the international mackerel and horse mackerel egg survey. The main objective of the survey is to produce both an index and a direct estimate of the biomass of the north east Atlantic mackerel stock and an egg production index for the southern and western horse mackerel stocks by sampling of mackerel and horse mackerel eggs and parental animals. The survey provides fisheries independent data which are used for the assessment of the above mentioned stocks. Countries participating are: UK (Scotland), Ireland, the Netherlands, Norway, Germany, Spain, Portugal, Iceland, Faroe Islands.

In general the concentration of the spawned eggs is correlated with the number of parental fish having produced the eggs. For planktonic fishing a modified Gulf Sampler will be used ("Nackthai"). The parental animals are sampled by trawl gear for fecundity estimates.

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:

DCF funded survey, coordinated by ICES Working Group WGMEGS

2.3 Relevant previous or future research projects:

2.4 Previous publications relating to the project:

Report of the working group on mackerel and horse mackerel egg surveys (Hamburg 2009), Living Resources Committee, ICES CM 2009/LRC:09

Report of the working group on mackerel and horse mackerel egg surveys (San Sebastian 2011), Science Committee, ICES CM 2011/SSGESST:07

Report of the working group on mackerel and horse mackerel egg surveys (Galway 2012), Science Committee, ICES CM 2012/SSGESST:04

First Interim Report of the Working Group on Mackerel and Horse Mackerel Egg Surveys (Copenhagen 2015), ICES CM 2015/SSGIEOM:09. 66 pp.

Second Interim Report of the Working Group on Mackerel and Horse Mackerel Egg Surveys, By correspondence. ICES CM 2016/SSGIEOM:09. 16 pp.

Final Report of the Working Group on Mackerel and Horse Mackerel Egg Surveys. (Vigo, 2017). ICES CM 2017/SSGIEOM:18. 134 pp.

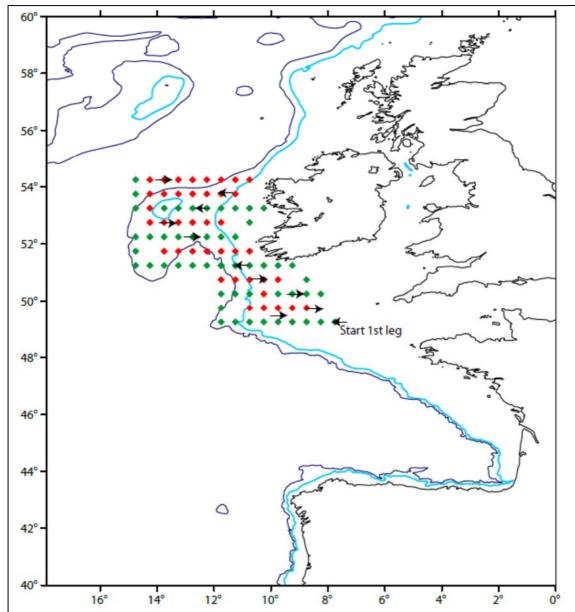
Report of the Working Group on Mackerel and Horse Mackerel Egg Surveys (Dublin, 2018) ICES CM 2018/EOSG:17 70 pp.

3. Geographical Areas

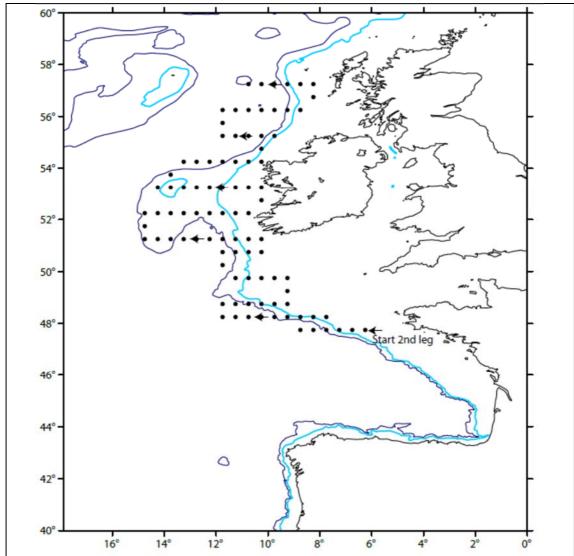
3.1 Indicate geographical areas in which the project is to be conducted (with reference in Latitude and longitude in decimal degrees, including coordinates of cruise/track/way points/sampling stations). Please provide coordinates in a separate excel spreadsheet. 57.30°N to 47°N; 15°W to 6°W; it is intended to sample the plankton stations either

on alternate transects (as shown on the chart 1) first from South to North and then from South to North or only on alternate transects from South to North (chart 2) in the sampling periods (app. 23/03-06/04 and 07/04-24/04) and to take one plankton sample in each of the statistical rectangles within the area. The exact location of the station is, if possible, set in the middle of the rectangle (hence the position of the stations in the attached excel sheet). If not, stations are located in the rectangle according to nautical requirements. Trawl stations will be set according to the distribution of the fish and according to the recordings made during the cruise. At each station CTD recordings are made simultaneously during plankton collection and additional hydro-graphic data (CTD) and water samples are taken on selected stations.

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.



Investigation area (colored diamonds = plankton stations), Campagne $N^{\rm o}$ 426 FRV "Walther Herwig III" for the first sampling period with intended cruise track



Investigation area (colored circles = plankton stations), Campagne $N^{\rm o}$ 426 FRV "Walther Herwig III" for the second sampling period with intended cruise track

4. Methods and means to be used

4.1 Particulars of vessel:	
Name:	Walther Herwig III
Type/Class:	Fisheries Research Vessel +100A5E2
Nationality (Flag State):	German
Identification Number (IMO/Lloyds No.):	9048392
Owner:	Federal Republic of Germany
Operator:	Bundesanstalt für Landwirtschaft und Ernährung (BLE), Referat 524, Haubachstraße 86, 22765 Hamburg
Overall length (meters):	63,18m
Maximum draught:	6,20m
Displacement/Gross Tonnage:	2131 BRZ
Propulsion:	Diesel-Electric
Cruising & maximum speed:	ca 13kn
Call sign:	DBFR
INMARSAT number and method and	Inmarsat Fleet Broadband + 870 773236187 (Bridge)
capability of communication (including emergency frequencies):	- 3.3 1.3230101 (Blidge)
Name of Master:	H.O. Janßen or deputy
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 methors specify type and dimens		entific instruments to be	used(for fishing gear		
Types of samples and Measurements:	Methods to be used:	Instruments to be used:	To be carried out within 12nm (yes or no):		
Fish: mackerel, horse mackerel (gonads samples)	Trawling (Approx. 5 trawling stations in UK waters, mainly above the 200m shelf edge, depending on found fish concentrations)	For bottom fishing the trawl net "Grande Overture General (GOV) will be used, for pelagic fishing the "PSN 205" or a 1600# pelagic trawl (see charts attached)	yes		
Plankton Samples	Plankton sampling (maximum sampling depth 200m or 5m above ground)	Modified Gulf Sampler (Nackthai)	yes		
Water samples	Probe parallel to trawling and plankton stations	CTD probe	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: 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):

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:

21/03/2019 - 26/04/2019

6.2 Indicate if multiple entries are expected:

Yes, in the UK area: at least twice

7. Port Calls

7.1 Dates and Names of intended ports of call:

only tentative port call depending on weather and schedule: Plymouth approx. during 05.04.-08.04.2019 for two days – no special requirements

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:
T TOJEGE.
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 submission of the date and research results.
The expected dates of submission of the data and research results: 4 weeks after end of cruise
9.2 Anticipated dates of submission to the coastal State of the final report:
4 weeks after end of cruise
9.3 Proposed means for access by coastal State to data (including format) and samples:
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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:
results are available through ICES WGMEGS
10. Other permits Submitted
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10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):
Ireland, France
11. List of Supporting Documentation
11.1 List of attachments, such as additional forms required by the coastal State, etc.:
Signature: (Jens Ulleweit)
Contact information of the focal point: Name:
Country:
Affiliation:
Address: Telephone:
Fax:
Email:

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-8.75	49.25	1	3	-13.25	54.25	1	59	-7.25	47.75 1	99	-13.75	52.25	1	147
-9.25	49.25	1	4	-12.75	54.25	1	60	-7.75	47.75 1	100	-13.25	52.25	1	143
-9.75	49.25	1	5	-12.25	54.25	1	61	-8.25	47.75 1	101	-12.75	52.25	1	14
-10.25	49.25	1	6	-11.75	54.25	1	62	-8.75	47.75 1	102	-12.25	52.25	1	145
-10.75	49.25	1	7	-11.25	54.25	1	63	-7.75	48.25 1	103	-11.75	52.25	1	146
-11.25	49.25	1	8	-10.75	54.25	1	64	-8.25	48.25 1	104	-11.25	52.25	1	147
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-10.75	50.25	1	13	-13.25	53.75	1	69	-10.75	48.25 1	109	-10.75	53.25	1	152
-10.25	50.25	1	14	-13.75	53.75	1	70	-11.25	48.25 1	110	-11.75	53.25	1	153
-9.75	50.25	1	15	-14.25	53.75	1	71	-11.75	48.25 1	111	-12.25	53.25	1	15
-9.25	50.25	1	16	-14.25	53.25	1	72	-11.75	48.75 1	112	-12.75	53.25	1	153
-8.75	50.25	1	17	-14.25	52.75	1	73	-11.25	48.75 1	113	-13.25	53.25	1	156
-8.25	50.25	1	18	-13.75	52.75	1	74	-10.75	48.75 1	114	-13.75	53.25	1	157
-8.75	50.75	1	19	-13.25	52.75	1	75	-10.25	48.75 1	115	-14.25	53.25	1	158
-9.25	51.25	1	20	-12.75	52.75	1	76	-9.75	48.75 1	116	-13.75	53.75	1	159
-9.75	51.25	1	21	-12.25	52.75	1	77	-9.25	48.75 1	117	-13.25	54.25	1	160
-10.25	51.25	1	22	-11.75	52.75	1	78	-9.25	49.25 1	118	-12.75	54.25	1	161
-10.75	51.25	1	23	-13.75	51.75	1	79	-9.25	49.75 1	119	-12.25	54.25	1	162
-11.25	51.25	1	24	-13.25	51.75	1	80	-9.75	49.75 1	120	-11.75	54.25	1	163
-11.75	51.25	1	25	-12.75	51.75	1	81	-10.25	49.75 1	121	-11.25	54.25	1	164
-10.75	51.25	1	26	-12.25	51.75	1	82	-10.75	49.75 1	122	-10.75	54.25	1	163
-11.25	51.25	1	27	-11.75	51.75	1	83	-11.25	49.75 1	123	-10.25	54.25	1	166
-11.75	51.25	1	28	-11.25	51.75	1	84	-11.75	50.25 1	124	-10.25	54.75	1	167
-12.25 -12.75	51.25 51.25	1	29 30	-10.75 -11.75	51.75 50.75	1	85 oc	-11.75	50.75 1 50.75 1	125	-9.75 -10.25	55.25 55.25	144	168
-12.75	51.25	4	31	-11.73	50.75	1	86 87	-11.25 -10.75	50.75 1	126 127	-10.25	55.25	1	169 170
-13.75	51.25	1	32	-10.75	50.75	1	88	-10.75	50.75 1	128	-10.75	55.25	1	171
-14.25	51.25	1	33	-10.75	50.75	1	89	-10.25	51.25 1	129	-11.75	55.25	1	172
-14.75	51.25	1	34	-9.75	50.75	1	90	-10.75	51.25 1	130	-11.75	55.75	1	173
-14.75	51.75	1	35	-10.25	50.25	1	91	-11.25	51.25 1	131	-11.75	55.25	1	174
-14.75	52.25	1	36	-10.75	49.75	1	92	-11.75	51.25 1	132	-11.25	56.25	1	173
-14.25	52.25	1	37	-10.25	49.75	1	93	-12.25	51.25 1	133	-10.75	56.25	1	176
-13.75	52.25	1	38	-9.75	49.75	1	94	-12.75	51.25 1	134	-10.25	56.25	1	177
-13.25	52.25	1	39	-9.25	49.75	1	95	-13.25	51.25 1	135	-9.75	56.25	1	178
-12.75	52.25	1	40	-8.75	49.75	1	96	-13.75	51.25 1	136	-9.25	56.25	1	179
-12.25	52.25	1	41					-14.25	51.25 1	137	-8.75	56.25	1	180
-11.75	52.25	1	42					-14.75	51.25 1	138	-8.25	56.75	1	181
-11.25	52.25	1	43					-14.75	51.75 1	139	-8.25	57.25	1	182
-10.75	52.75	4	44								-9.25	57.25	1	183
-10.25	53.25	1	45								-9.75	57.25	1	184
-10.75 -11.25	53.25 53.25	1	46 47					-			-10.25 -10.75	57.25 57.25	1	185 186
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