NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART A. GENERAL

1. NAME OF RESEARCH SHIP: *FRV "Walther Herwig III"* CRUISE NO. *WH 366*

2. DATE OF CRUISE: FROM *26.07.2013* TO *22.08.2013*

3. OPERATING AUTHORITY: *Bundesanstalt für Landwirtschaft und Ernährung, Referat 524*
Haubachstr. 86, 22765 Hamburg

Telephone *+49 40 306860550*

4. OWNER (if different from para. 3): *Federal Republic of Germany*

5. PARTICULARS OF SHIP

NAME	*FRV "Walther Herwig III"*
NATIONALITY	*Federal Republic of Germany*
OVERALL LENGTH (METRES)	*63.18 metres*
MAXIMUM DRAUGHT (METRES)	*6.20 metres*
NETT TONNAGE	*2131 BRZ*
PROPULSION	Steam Turbine / Diesel / *Diesel Electric*
CALL SIGN	*DBFR*

REGISTERED PORT & NUMBER (if registered fishing vessel)

6. CREW

NAME OF MASTER	*J. Vandrei*
NUMBER OF CREW	*22*

7. SCIENTIFIC PERSONNEL

NAME AND ADDRESS OF SCIENTIST - IN - CHARGE	*Dr. Anne Sell* *TI - Institut für Seefischerei* *Palmaille 9* *D-22767 Hamburg*
e-mail:	*anne.sell@ti.bund.de*
Tel./FAX No.	*+49 40 38905-246/ +49 40 38905-263*
NUMBER OF SCIENTISTS	*12*

8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference in latitude and longitude):

Entire North Sea between 54° N to 62° N, particularly in those rectangles assigned to Germany by ICES, and sampling areas for the GSBTS (see attached map)

9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE: *International Bottom Trawl Survey (IBTS) third quarter of 2013 under ICES coordination, and German Small-scale Bottom Trawl Survey (GSBTS)*

10. DATES AND NAMES OF INTENDED PORTS OF CALL: *36 h within the period between 05.08. and11.08.2013 in Lerwick/UK or Stavanger/NOR or Haugesund/NOR*

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL: *None (cruise mid-term break)*

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART B. GENERAL

1. NAME OF RESEARCH SHIP *FRV Walther Herwig III* CRUISE NO: *WH 366*
2. DATES OF CRUISE *FROM 26.07.2013* *TO 22.08.2013*

3. a) PURPOSE OF RESEARCH

Participation in the ICES coordinated International Bottom Trawl Survey (IBTS) 2013 Q3 in the North Sea, and conducting the annual Q3 German Small-scale Bottom Trawl Survey (GSBTS). - Demersal trawling survey to assess year strengths and stock size indices for cod, whiting and others (IBTS). - Monitoring of fish assemblages and benthos in small defined areas (GSBTS).

b) GENERAL OPERATIONAL METHODS (including full description of any fishing gear-trawl type, mesh size, etc.)

- *Bottom trawling (net: Grande Overture Vertical (GOV), standard net approved by ICES, codend 20 mm)*
- *Grab sampling of sediments and benthic infauna*
- *Biochemical investigations*
- *Plankton investigations*
- *Hydrographic investigations*
- *Echo registration*

See also 5b and attached gear drawings

4. ATTACH CHART showing, at the appropriate scale, the geographical area of the intended work, positions of the intended stations, tracks of survey lines, positions of moored equipment, areas to be fished

Entire North Sea between 54° N to 62° N, especially in those rectangles assigned to Germany by ICES, and sampling areas for the German Small-scale Bottom Trawl Survey (see attached map).

5 a) TYPES OF SAMPLES REQUIRED e.g. Geological / Water / Plankton /Fish/Radionuclides.

Samples: Fish, benthic invertebrates, sediment and water samples.
All North Sea fish stocks are being worked on according to the ICES manual. No fish is retained on board except for scientific samples (max. 2 tonnes).

b) METHODS OF OBTAINING SAMPLES (e.g. dredging / coring / drilling / fishing etc.). (When using fishing gear indicate fish stocks being worked, quantity of each species required, quantity of fish being retained on board)

Fishing with otter board trawl / benthic epifauna sampling with 2-m beam trawl / sediment grab samples (van Veen grab) / CTD casts / water bottle sampling / potentially plankton sampling with nets

All North Sea fish stocks are being worked on according to the ICES manual. No fish is retained on board except for scientific samples.
Small amounts of fish are kept for direct consumption on board and limited amounts (max 4 kg/person) for crew's home consumption.

6. DETAILS OF MOORED EQUIPMENT: *none*

Dates: Laying Recovery Description Depth Latitude Longitude

None

7. ANY HAZARDOUS MATERIALS: (Chemicals, Explosives, Gases, Isotopes, etc.)
(Use separate sheet if necessary)

(a) TYPE AND TRADE NAME *Formaldehyde*

(b) CHEMICAL CONTENT (& formula) *37 % Formaldhyde*

(c) IMO IMDG CODE Reference & UN No. *FORMALEHYDE SOLUTION 2209*

(d) QUANTITY & METHOD OF STOWAGE ON BOARD *ca. 30 L stored in appropriate plastic containers*

(e) IF EXPLOSIVES give date (s) of detonation *None*

- Method of detonation

- Position of detonation

- Frequency of detonation

- Depth of detonation

- Size of explosive charge in Kgs

8. DETAIL & REFERENCE OF:
a) ANY RELEVANT PREVIOUS / FUTURE CRUISES:
Cruise is part of a standard series coordinated by ICES since the mid 1960's
International Bottom Trawl Survey since 1991 Annual national survey GSBTS since 1987

b) ANY PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROPOSED CRUISE.
(Attach separate sheet if necessary)

All data are stored at ICES DATRAS and published in the framework of reports of the respective ICES working group: e.g. ICES 2011: Report of the International Bottom Trawl Survey Working Group (IBTSWG), ICES CM 2011/SSGESST:06. GSBTS: Senckenbergiana maritima (2007) 37: 13-82.

9. NAMES AND ADDRESSES OF SCIENTISTS IN COASTAL STATE (S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE.
United Kingdom: Brian Harley, CEFAS, Lowestoft Laboratory, Pakefield Road, Lowestoft, Suffolk, NR33 0HT The Netherlands: Henk Heessen, IMARES, P.O. Box 68, 1970 AB Ijmuiden Denmark: Jörgen Dalskov, DTU Aqua, Charlottenlund Slot, DK2920 Charlottenlund, Norway: Irene Huse, Richard Nash IMR, P.O. Box 1870 Nordnes, N 5817 Bergen

10. STATE:

(a) WHETHER VISITS TO THE SHIP IN PORT BY COASTAL STATE SCIENTISTS WILL BE ACCEPTABLE *YES*
Please contact chief scientist well ahead of time

(b) PARTICIPATION OF AN OBSERVER FROM THE COASTAL STATE FOR ANY PART OF THE CRUISE TOGETHER WITH THE DATES AND THE PORTS FOR EMBARKATION/DISEMBARCATION
No spare accommodation available. Bremerhaven, 26.07.2013; port of mid-term break + partial crew exchange (Lerwick, Stavanger or Haugesund) between 08/05 and 08/11/2013; Bremerhaven, 22.08.2012.

c) WHEN RESEARCH DATA FROM THE INTENDED CRUISE IS LIKELY TO BE MADE AVAILABLE TO THE COASTAL STATE AND BY WHAT MEANS
Generally, all data will be uploaded directly to ICES-DATRAS for further treatment about 4 weeks after the cruise.
Furthermore:
1. Cruise summary report through official channels; English summary will be available about 4 weeks after the cruise
2. ICES IBTS working group report, ca. May 2014

PART-C: SCIENTIFIC EQUIPMENT **COASTAL STATE** ***United Kingdom***

COMPLETE THE FOLLOWING TABLE
SEPARATE COPY FOR EACH COASTAL STATE

PORT CALL *Lerwick/ Shetland Islands*

DATE: *between 08/05 and 08/11/2013*

INDICATE „YES“ OR „NO“

LIST OF SCIENTIFIC WORK BY FUNCTION e.g. Magnetometry Gravity,Diving Seismics Bathymetry Seabed sampling Trawling Echo sounding Water sampling U / W TV Moored instruments Towed instruments	Water Column including Sediment Sampling of the Seabed	Fisheries Research within Fishing Limits	Research concerning the natural resources of the continental shelf or its physical characteristics	Distance from coast		
				Within 12 NM	Between 12-200 NM	(Continental shelf work only) Beyond 200 NM but within the continental margin
Echo sounding	*yes*	*yes*	*no*	*no*	*yes*	*no*
Trawling	*yes*	*yes*	*no*	no	*yes*	*no*
Ichthyoplankton	*yes*	*yes*	*no*	*no*	*yes*	*no*
CTD profiling	*yes*	*yes*	*no*	*no*	*yes*	*no*
Water sampling	*yes*	*yes*	*no*	*no*	*yes*	*no*

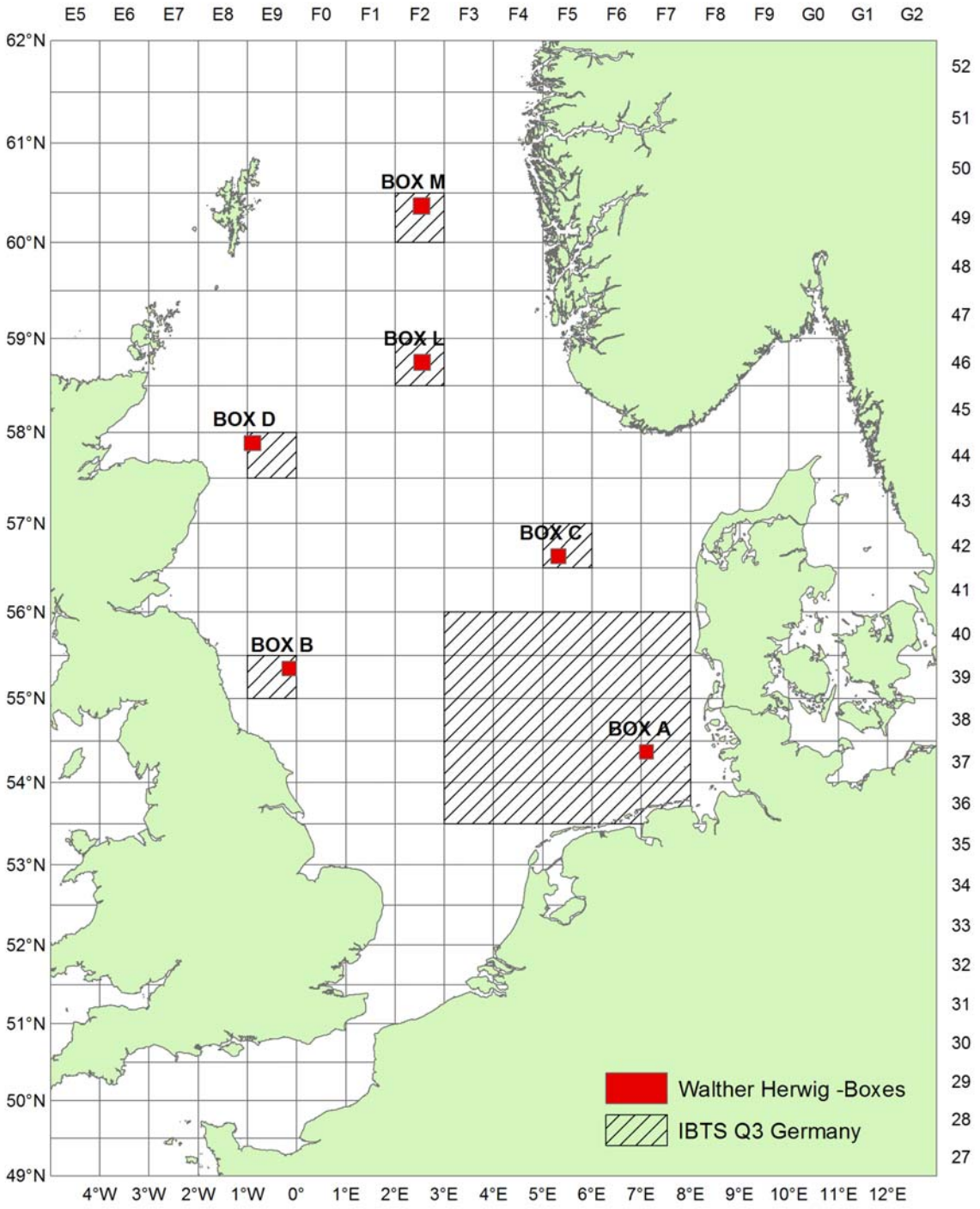
Anne Sell

_____ Dated *01.06.2012*

(On behalf of the Principal Scientist)

N.B. IF ANY DETAILS ARE MATERIALLY CHANGED REGARDING DATES / AREA OF OPERATION AFTER THIS FORM HAS BEEN SUBMITTED THE COASTAL STATE AUTHORITIES MUST BE NOTIFIED IMMEDIATELY

Survey Area

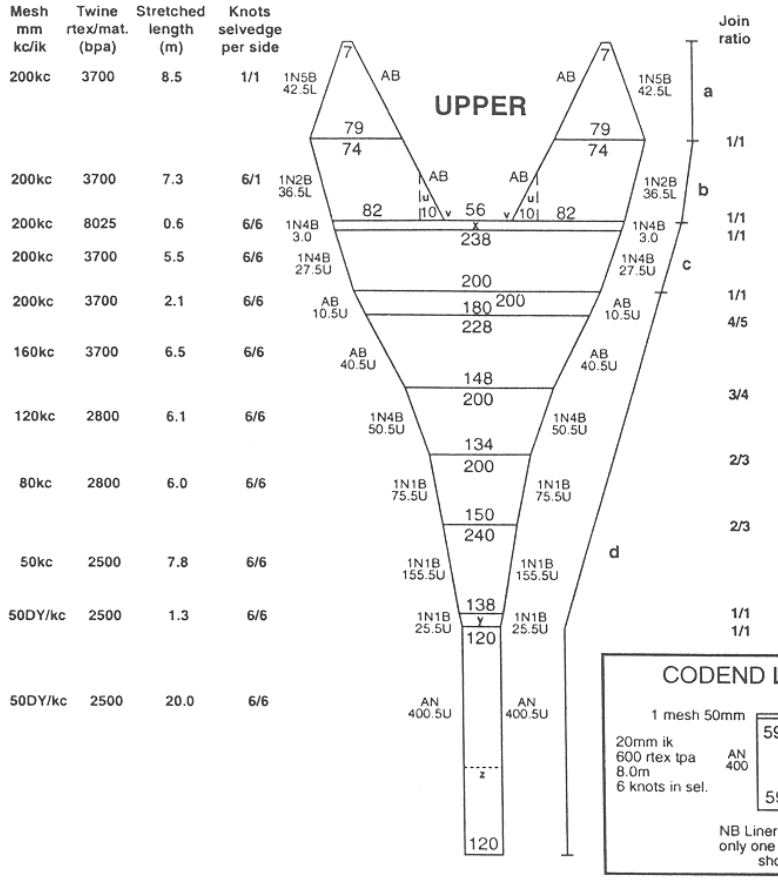


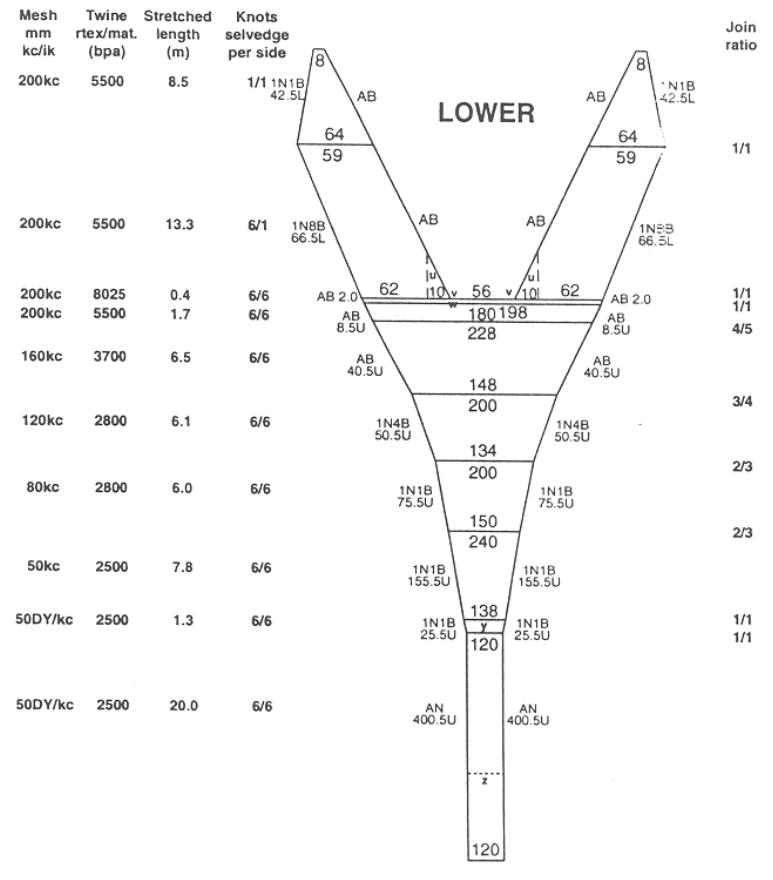
Sampling areas for cruise WH 366. Red: Small-scale investigations (GSBTS "Boxes"); hatched: Rectangles for the International Bottom Trawl Survey (IBTS) Q3, to be sampled with one station per rectangle.

Position of the “Boxes” sampled during the GSBTS:

Boundaries	S	N	W	E
BOX B	55° 16’ N	55° 26’ N	000° 18’ W	000° 00’ W
BOX C	56° 33’ N	56° 43’ N	005° 10’ E	005° 28’ E
BOX D	57° 48’ N	57° 58’ N	001° 04’ W	000° 44’ W
BOX L	58° 40’ N	58° 50’ N	002° 23’ E	002° 43’ E
BOX M	60° 17’ N	60° 27’ N	002° 22’ E	002° 42’ E

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





Headline : 36m (15.50 + 5.00 + 15.50) x 14mm ϕ wire (f/c) served (6/19 - 12/6/1 65.8kg/100m).
Fishingline : 47.20m (21.10 + 5.00 + 21.10) x 22mm ϕ combination wire 6 strand/steel core 54.6kg/100m).
Winglines : Upper 8.2m, Lower 8.2m x 20mm ϕ combination wire (6 strand/steel core 54.6kg /100m)

a - 7.1m x 14mm ϕ wire (6/19 - 12/6/1 - 65.8kg/100m)
b - 6.7m x 20mm ϕ combination wire (6 strand/steel core - 54.4kg/100m)
c - 5.55m x 20mm ϕ combination wire (6 strand/steel core - 54.4kg/100m)
d - length for length x 22mm ϕ nylon (3 strand - 26kg/100m)

u - Gussets 8025rtex
v - 4 meshes gathered at quarters

w - 200 198
x - 240 238
y - 138 120

z - Joining position for Liner

kc = knot centre to knot centre
ik = inside knot measurement
tpa = polyamide twine/twisted
bpa = polyamide twine/braided
dy = double yarn

Method of join used, sewing.
Type of knot, weavers knot.

NOTE TO NETMAKERS

The numbers of meshes shown for netting panel widths do NOT include selvedge meshes. Five meshes (six knots) per selvedge must be added where indicated. Conversely to obtain panel depths one row (1/2 mesh) must be subtracted from each panel as the joining row is included in the number of meshes deep. The total numbers of meshes (width and depth) for each individual panel are set out in GOV 36/47 Groundfish Survey Trawl Checklist (Page 2 of 5)

GOV standard fishing gear (rigging)