

Foreign Commonwealth Office UK/Scotland Aviation Maritime Department Fiona Mayle King Charles Street London SW 1A 2AH United Kingdom

Dear Mrs. Mayle,

Herewith I send you the forms for permission for our research vessel TRIDENS for research activities in waters governed by the jurisdiction of England.

It will be for the period of 29-06-2009 tot 24-07-2009 (wk. 27-30).

Wageningen IMARES

DATUM

19 februari 2009

Els Hoeboer

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E-MAIL

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With kind regards,

Mw. E. Hoeboer

copy; J.W. Groen, dir. Visserijen

Wageningen UR (Wageningen Universiteit & Researchcentrum) is een samenwerkingsverband tussen DLO, Wageningen Universiteit en Hogeschool Van Hall Larenstein



NOTIFICATION OF PROPOSED RESEARCH

PART A : GENERAL

1. NAME OF RESEARCH SHIP: TRIDENS CRUISE NO: wk. 27-30/09

2. DATES OF CRUISE FROM 29-06-2009 TO 24-07-2009

3. OPERATING AUTHORITY Ministry of Agriculture, Nature Management

& Fisheries

Bezuidenhoutseweg 73

THE HAGUE

TELEPHONE 070-3792349 TELEX 32040 Lavinl

FACSIMILE 070-3825648 E-MAIL J.W.Groen@viss.agro.nl

4. OWNER (If different from Para 3)

5. PARTICULARS OF SHIP NAME TRIDENS

NATIONALITY Dutch

OVERALL LENGTH 73,5 METRES

MAXIMUM DRAUGHT 5,20 METRES

NETT TONNAGE 659

POPULSION DIESEL

CALL SIGN PBVO

REGISTRATION PORT & NUMBER
(if registered fishing vessel)

6. CREW NAME OF MASTER K. Reichgeld

NUMBER OF CREW 15

7. SCIENTIFIC PERSONNEL NAME AND ADDRESS OF R. ter Hofstede

SCIENTIST IN CHARGE Wageningen IMARES (formely "Netherlands

Inst. For Fish. Research)

P.O. Box 68, IJmuiden

TEL/FAX NO 0317-480900/0317-487326

NO: OF SCIENTISTS 4

GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference in Latitude & Longitude)

52°00 - 62°00 N and 004°30 W - 008°30 E

9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE:

herring and sprat

North Sea hydro acoustic survey for

10. DATES AND NAMES OF INTEND PORTS OF CALL: Aberdeen: 04-07-2009 - 06-07-2009 Leith 18-07-2009 - 20-07-2009

(or Danish port i.e. Esbjerg)

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART B : GENERAL

1. NAME OF RESEARCH SHIP: TRIDENS CRUISE NO: wk. 27-30/09

2. DATES OF CRUISE FROM 29-06-2009 TO 24-07-2009

- a) PURPOSE OF RESEARCH To carry out an hydro acoustic survey defining the abundance of herring and sprat in the North Sea, in co-operation with the institutes of Norway, Scotland, Denmark and Germany. Calibration of the echosounder in a sheltered area, preferably at Scapa Flow, Orkneys 58°56′71 N 003°00′57 W, Stavanger fjord 59°05N 005°36 (second choice) or Kristiansand harbour 58°08N 007°59E (third choice).
 - b) GENERAL OPRATIONAL METHODS (including full description of any fishing geartrawl type, mesh size etc:)

A pelagic trawl (2000 meshes), fitted out with an inner codend of 20 mm meshes, will be used for identifying the traces.

For the calibration the ship has to be anchored in a sheltered location, and the 38 kHz transducer will be calibrated with the aid of a small copper sphere that is lowered below the keel of the ship. For the calibration of a second 38 kHz- and a 200 kHz transducer which is build in a towed body, the towed body (2,5 x 1 m; 300 kg; stainless steel) has be lowered a few meters below the surface. The entire operation will take approximately 8 hours. A CTD profile will be taken at the calibration site. No fishing will be conducted, and no other electronic instruments than echosounder with the normal 38 kHz and 200 kHz transducer and the CTD will be operated.

- 4. ATTACH CHART showing (on an appropriate scale) the geographical area of the intended work, positions od intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished: Chart included.
- 5. a) TYPES OF SAMPLES REQUIRED eg Geological/Water/Plankton/Fish/Radionuclide:

Samples of pelagic fishes for biological research will be retained on board. CTD profiles.

b) METHODS OF OBTAINING SAMPLES (eg dredging/coring/drilling/fishing etc) (When using fishing gear indicate fish stocks being worked, quantity of each species require, quantity of fish to be retained on board)

Samples of pelagic fishes will be collected by fishing CTD profiles will be taken by lowering a CTD probe as deep as the bottom.

6. DETAILS OF MOORED EQUIPMENT: none

DATES

<u>Laying</u> <u>Recovery</u> <u>Description</u> <u>Depth</u> <u>Latitude</u> <u>Longitude</u>

7. ANY HAZERDOUS MATERIAL: (Chemicals/Explosives/Gases/Raioactive etc)

(Use separate sheet if necessary) none

- a) TYPE AND TRADE NAME
- b) CHEMICAL CONTENT (& Formula)
- c) IMO IMDG CODE Reference & UN Number
- d) QUANTITY & METHOD OF STOWAGE ON BOARD
- e) IF EXPLOSIVES give date(s) of detonation
 - 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:

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From 24-06-96 to 19-07-96: North Sea hydro acoustic survey From 16-06-97 to 18-07-97: North Sea hydro acoustic survey From 22-06-98 to 17-07-98: North Sea hydro acoustic survey From 21-06-99 to 16-07-99: North Sea hydro acoustic survey From 19-06-00 to 14-07-00: North Sea hydro acoustic survey From 25-06-01 to 20-07-01: North Sea hydro acoustic survey From 24-06-02 to 19-07-02: North Sea hydro acoustic survey From 28-06-04 to 21-07-04: North Sea hydro acoustic survey From 27-06-05 to 22-07-05: North Sea hydro acoustic survey From 26-06-06 to 21-07-06: North Sea hydro acoustic survey From 25-06-07 to 20-07-07: North Sea hydro acoustic survey From 23-06-08 to 17-07-08: North Sea hydro acoustic survey From 23-06-08 to 17-07-08: North Sea hydro acoustic survey
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b) ANY PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROPOSED CRUISE:

ICES 2004. Report of the Planning Group for Herring Surveys. ICES CM 2004/G:05 ICES 2005. Report of the Planning Group for Herring Surveys. ICES CM 2005/G:04 ICES 2006. Report of the Planning Group for Herring Surveys. ICES CM 2006/LRC:04 ICES 2007. Report of the Planning Group for Herring Surveys. ICES CM 2007/LRC:01

- 9. NAMES AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE:
 - R. Toresen, Inst. of Mar. Res., PO Box 1870 Nordnes, N-5024 Bergen, Norway

Paul Fernandes, FRS Mar. Lab., PO Box 101, Victoria Road, AB11 9DB Aberdeen, Scotland

Jens Ulleweit, Institut für Seefischerei (ISH) Bundesforschungsanstalt für Fischerei, Palmaille 9, D-22767 Hamburg, Germany

Karl-Johan Staehr, Danish Institute for Fisheries Research (DTU Aqua - former DIFRES), North Sea Centre, P.O.Box 101, DK-9850 Hirtshals, Denmark

10. <u>STATE:</u>

a) WHETHER VISITS TO THE SHIP IN PORT BY SCIENTISTS OF THE COASTAL STATE CONCERNED WILL BE ACCEPTABLE

YES

- b) PARTICIPATION OF AN OBSERVER FROM THE COASTAL STATEFOR ANY PART OF THE CRUISE TOGETHER WITH THE DATES AND THE PORTS FOR EMBARKATION/DISEMBARKATION
- c) WHEN RESEARCH DATA FROM THE INTENDED CRUISE IS LIKELY TO BE MADE AVAILABLE TO THE COASTAL STATE AND BY WHAT MEANS

Cruise report within two months after the survey.

PART C: SCIENTIFIC EQUIPMENT

COMPLETE THE FOLLOWING TABLE -SEPERATE PAGE FOR EACH COASTAL STATE COASTAL STATE United Kingdom/ Scotland /

PORT CALL

Aberdeen / Leith

DATES 29-06-2009 - 24-

07-2009

₼:

INDICATE "YES" OR "NO"

	YES	YES	NO	YES	YES	YES
GRAVITY DIVING: SEISMICS: BATHYMETRY	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 WITHIN 12 NMS	BETWEEN 12-200 NM	(CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN

E.C. Hoeboer-van Wooning

(On behalf to the Principal Scientist)

Dated

16 February 2009

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

COASTAL STATE

Norway

COMPLETE THE FOLLOWING TABLE - SEPERATE PAGE FOR EACH COASTAL STATE

PORT CALL (possible

calibration of echosounders in the vicinity of Kristiansand or Stavanger harbour see part B)

DATES 30 June/01 July 2009

INDICATE "YES" OR "NO"

	YES	YES	NO	YES	YES	YES
eg: MAGNETOMETRY: GRAVITY DIVING: SEISMICS: BATHYMETRY SEABED SAMPLING FRAWLING ECHO SOUNDING: WATER SAMPLING U/W T.V.: MOORED INSTRUMENTS: FOWED 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	WITHIN 12 NMS	BETWEEN 12-200 NM	(CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN
LIST SCIENTIFIC WORK BY FUNCTION				DISTANCE FROM COAST		

E.C. Hoeboer-van Wooning

(On behalf to the Principal Scientist)

Dated

16 February 2009

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PART C: SCIENTIFIC EQUIPMENT

COMPLETE THE FOLLOWING TABLE -SEPERATE PAGE FOR EACH COASTAL STATE COASTAL STATE

Denmark

PORT CALL (possibly) Esbjerg

<u>DATES</u> 18 July - 20 July 2009

INDICATE "YES" OR "NO"

FOWED INSTRUMENTS	YES	YES	NO	YES	YES	YES
eg: MAGNETOMETRY: GRAVITY DIVING: SEISMICS: BATHYMETRY SEABED SAMPLING FRAWLING ECHO SOUNDING: WATER SAMPLING J/W T.V.: MOORED 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	WITHIN 12 NMS	BETWEEN 12-200 NM	(CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN
LIST SCIENTIFIC WORK BY FUNCTION				DISTANCE FROM COAST		

E.C. Hoeboer-van Wooning

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PART C: SCIENTIFIC EQUIPMENT

COMPLETE THE FOLLOWING TABLE - SEPERATE PAGE FOR EACH COASTAL STATE

COASTAL STATE

Germany

PORT CALL

DATES

INDICATE "YES" OR "NO"

LIST SCIENTIFIC WORK BY FUNCTION				DISTANCE FROM COAST		
eg: MAGNETOMETRY: GRAVITY DIVING: SEISMICS: BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING: WATER SAMPLING U/W T.V.: 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	WITHIN 12 NMS	BETWEEN 12-200 NM	(CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN
	YES	YES	NO	YES	YES	YES

E.C. Hoeboer-van Wooning

(On behalf to the Principal Scientist)

Dated

16 February 2009

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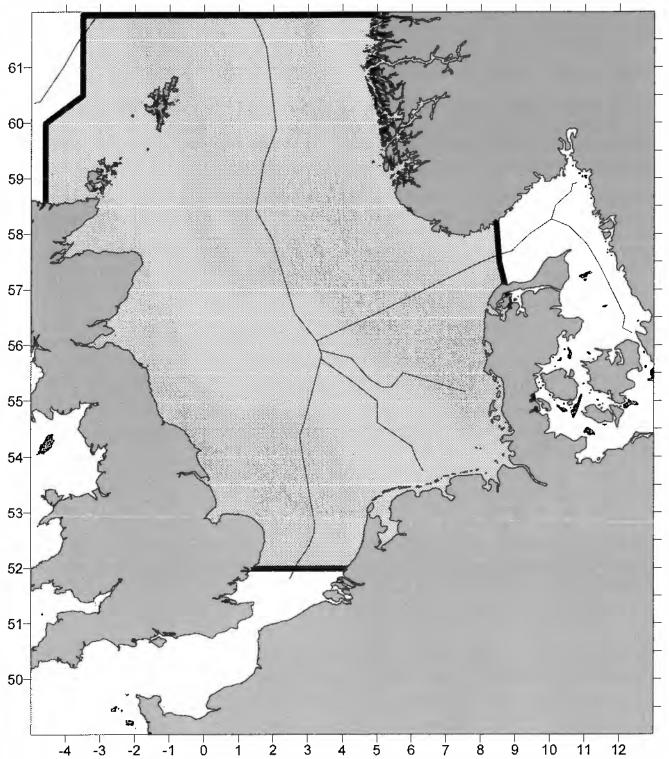
Calibration of SIMRAD EK-60 echo sounder on board RV "Tridens"

In June/July 2009 the RV Tridens will participate in the annual international herring echo survey in the North Sea. During this survey, the transducers of the SIMRAD EK-60 has to be calibrated, in order to make sure that the results of Tridens are comparable to those of other research vessels.

Calibration of this equipment, according to the manufacturer, has to take place in a sheltered area without currents, with water of about the same temperature and salinity as the water in the survey area, and a minimum depth of about 25 meters.

The calibration of the Tridens acoustic system is scheduled in week 27 (29 June -3 July 2009) near Scapa Flow, Orkneys, Scotland. However, the procedure may have to be conducted at another site, preferably in Stavanger fjord, Norway another time during the survey depending on weather conditions.

The ship has to be anchored in a sheltered location, and the hull-mounted 38 kHz transducer will be calibrated with the aid of a small copper sphere that is lowered below the keel of the ship. For the calibration of a second 38 kHz transducer and a 200 kHz transducer which are build in a towed body, the towed body (2,5 x 1 m; 300 kg; stainless steel) has be lowered at the site a few meters below the surface. The entire operation will take approximately 6 hours. A CTD profile will be taken at the calibration site. No fishing will be conducted, and no other electronic instruments than the echosounder with the normal 38 KHz and 200 kHz transducers and the CTD will be operated.



-4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9

North Sea acoustic survey for herring, TRIDENS 29 June – 27 July 2009

The outer border of the survey area is indicated in black.