NOTIFICATION OF PROPOSED RESEARCH

PART A : GENERAL

1.	NAME OF RESEARCH SHIP	:	TRIDENS			CRUISE	NO: wk	. 31-37
2.	DATES OF CRUISE	FROM	31-07 -201 7	7		ТО	15 -09-	2017
3.	OPERATING AUTHORITY		Ministry o Rijkswate Postbus 5	ersta	at Dier	nst Noor	rdzee	
		TELEPHON	<u>e</u> +31 (C)70	- 3366	303		TELEX
		FACSIMIL	E					
4.	<u>OWNER</u> (If different from Para 3)							
5.	PARTICULARS OF SHIP	NAME		TRID	ENS			
		NATIONAI	JITY	Dutc	h			
		OVERALL	LENGTH	73,5	METRE	IS		
		MAXIMUM	DRAUGHT	5,20	METRE	IS		
		NETT TOP	INAGE	659				
		POPULSI	<u>DN</u>	DIES	EL			
		CALL SIC	<u>SN</u>	PBVO	1			
		<u>REGISTRATION PORT & NUMBER</u> (if registered fishing vessel)						
6.	CREW	NAME OF	MASTER	-	K. Reich	ngeld		
		NUMBER (OF CREW		21			
7.	SCIENTIFIC PERSONNEL	-	D ADDRESS O ST IN CHARG	E .	I.J. de IMARES P.O. Boz	Boois x 68, IJ	muiden	

<u>TEL/FAX NO</u> 0317-487070/0317-487326

NO: OF SCIENTISTS 5

- 8. <u>GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE</u> (with reference in Latitude & Longitude) Southern and Central North Sea: 51°N to 61°N, 4°W to 8.30'E.
- 9. <u>BRIEF DESCRIPTION OF PURPOSE OF CRUISE:</u> To participate in the ICES coordinated Beam Trawl Survey, to obtain a fishery-independent estimate of the intensity of the most common age-groups of plaice and sole in the North Sea (Stock assessment) and information on the distribution of demersal fish and macro-zoobenthos in the North Sea
- 10. <u>DATES AND NAMES OF INTEND PORTS OF CALL</u>: Helgoland or Esbjerg in week 32/33; Aberdeen, and an English port (Sunderland, Newcastle) for weeks 34-37; in case the survey order has to be re-arranged of bad weather Danish or Norwegian port

<u>PART B : GENERAL</u>

- 1.NAME OF RESEARCH SHIP:TRIDENSCRUISE NO: wk. 34-37
- 2. <u>DATES OF CRUISE</u> FROM 31-07**-2017** TO 15**-09-2017**
- 3. <u>a) PURPOSE OF RESEARCH</u> This survey aims at estimating the recruitment of a number of commercial fish species, such as plaice, sole, cod, dab, turbot, brill, lemon sole. Also benthos will be collected to study biodiversity. During the survey also hydrographical data are collected by using Seabird CTD downcasts.

b) GENERAL OPERATIONAL METHODS (including full description of any fishing geartrawl type, mesh size etc.) In each ICES rectangle visited one or more hauls (30 minutes) will be made with or an 8 m beam trawl (40 mm mesh) and a 2 m beam trawl (4 mm mesh). Before or after each haul a profile will be made with a CTD-Sonde. On approx. 6-8 separate locations a boxcorer will take core samples of the seabed (6 samples per location). The cores will be incubated on board and subjected to different treatments to measure effects on biogeochemical cycling. This work will carried out by Justin Tiano (PhD student NIOZ) as part of the İmpact Assessment of Pulse trawling (Project leader Edward Schram, WMR)

- 4. <u>ATTACH CHART</u> showing (on an <u>appropriate</u> 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: see below
- 5. <u>a) TYPES OF SAMPLES REQUIRED</u> eg Geological/Water/Plankton/Fish/Radionuclide: Fish, benthos and hydrographic samples

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) fish samples: 8 m beam trawl, approx. 150 hauls benthos samples: 8 m beam trawl (approx. 150 hauls) and 2 m beam (approx. 15 hauls) water samples: CTD probe (approx. 150 stations) Sediment sores: Boxcorer (approx total of 48 cores)

6. <u>DETAILS OF MOORED EQUIPMENT:</u> none

Laying Recovery Description Depth Latitude Longitude

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

(Use separate sheet if necessary)

- 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. <u>DETAIL & REFERENCE OF:</u>

a) ANY RELEVANT PREVIOUS/FUTURE CRUISES: The beam trawl survey started in 1985.

b) ANY PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROPOSED CRUISE: Each year the results of the survey are published by ICES as: "Report of the Working Group on Bear Trawl Surveys (WGBEAM)". See www.ices.dk

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:

Mr. J. Dalskov	Mr. I. Holmes	Mr. A. Newton
Danmarks Fiskeri-og	CEFAS	Marine Laboratory
Havundersøgelser	Lowesoft NR33 OHT	Victoria Road
Nordsøcentret	Suffolk	Aberdeen AB9 8DB
Box 101	England	Scotland
Denmark		

Dr. C. Stransky Tünen Institut Palmaille 9 2000 Hamburg 50 Germany Mr. O. Smedstad Institute of Marine Research P.O. Box 1870/72, Nordnes 5024 Bergen Norway

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

Data of the fish trawls will be submitted to the DATRAS Database (datras.ices.dk), hydrographoical data will be submitted to the hydrographical database ocean.ices.dk, both hosted by the ICES-secretariat in Copenhagen, from where the information is available to all participating countries.

COASTAL STATE

United Kingdom, Denmark, Norway,Germany

COMPLETE THE FOLLOWING TABLE -SEPERATE PAGE FOR EACH COASTAL STATE

PORT CALL

DATES

INDICATE "YES" OR "NO"

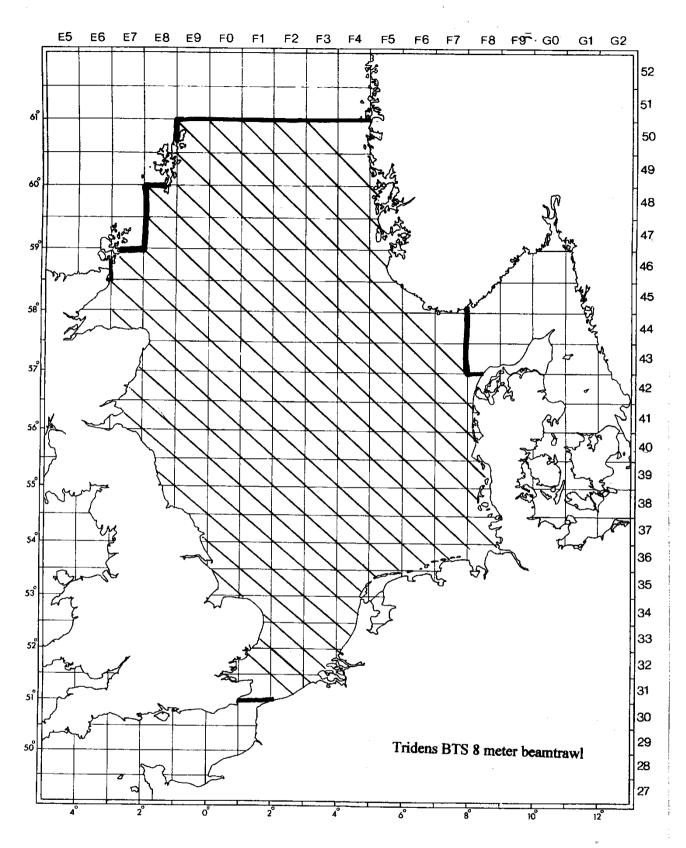
LIST SCIENTIFIC			DISTANCE FROM COAST				
WORK BY							
FUNCTION	WATER	FISHERIES	RESEARCH	WITHIN	WITHIN	BETWEEN	(CONTINENTA
	COLUMN	RESEARCH	CONCERNING THE	3 NMS	12 NMS	12-200NM	L SHELF
eg:	INCLUDING	WITHIN	NATURAL				WORK ONLY)
	SEDIMENT	FISHING	RESOURCES OF				
MAGNETOMETRY	SAMPLING OF	LIMITS	THE CONTINENTAL				BEYOND 200
GRAVITY	THE SEABED		SHELF OR ITS				NM BUT
DIVING			PHYSICAL				WITHIN
SEISMICS	(water		CHARACTERISTICS				CONTINENTAL
BATHYMETRY	column						MARGIN
SEABED SAMPLING	using						
TRAWLING	vertical						
ECHO SOUNDING	CTD,						
WATER SAMPLING	Sediment						
U/W T.V.	photography						
INSTRUMENTS	using SPI						
TOWED	camera)						
INSTRUMENTS							
	YES	YES	NO	NO	YES	YES	NO

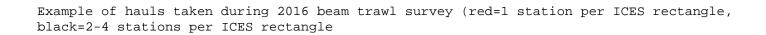
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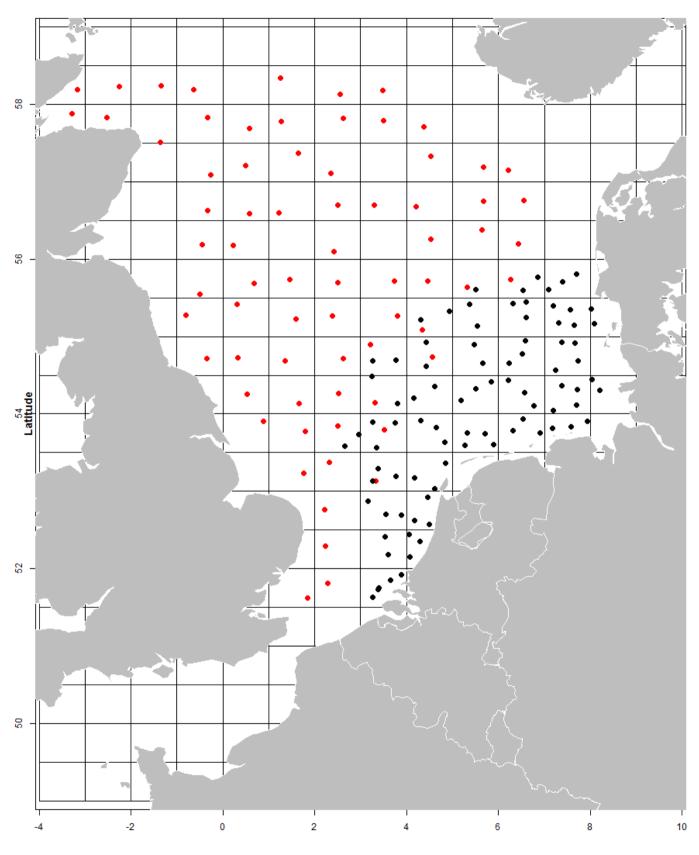
I.J. de Boois
(On behalf to the Principal Scientist)

Dated 01-02-2017

NB 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.







Longitude