### NOTIFICATION OF PROPOSED RESEARCH

### PART A : GENERAL

1. NAME OF RESEARCH SHIP: TRIDENS CRUISE NO: wk. 31-37

2. DATES OF CRUISE FROM 30-07-2018 TO 14-09-2018

3. OPERATING AUTHORITY

Ministry of transport & public works
Rijkswaterstaat Dienst Noordzee

Postbus 5807, 2280 HV Rijswijk

<u>TELEPHONE</u> +31 (0)70 - 3366 303 <u>TELEX</u>

FACSIMILE

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 21

7. SCIENTIFIC PERSONNEL NAME AND ADDRESS OF I.J. de Boois

SCIENTIST IN CHARGE IMARES

P.O. Box 68, IJmuiden

TEL/FAX NO 0317-487070/0317-487326

NO: OF SCIENTISTS 6

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

  Southern and Central North Sea: 51°N to 61°N, 4°W to 8.30'E.
- 9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE: 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. DATES AND NAMES OF INTEND PORTS OF CALL: 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

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL:

### NOTIFICATION OF PROPOSED RESEARCH CRUISE

## PART B : GENERAL

1. NAME OF RESEARCH SHIP: TRIDENS CRUISE NO: wk. 34-37

2. DATES OF CRUISE FROM 30-07-2018 TO 14-09-2018

- 3. a) PURPOSE OF RESEARCH 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. 12 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 "Impact Assessment of Pulse trawling" (Project leader Edward Schram, WMR)
- 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: 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 72 cores)
- 6. DETAILS OF MOORED EQUIPMENT: none

DATES

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. DETAIL & REFERENCE OF:
  - 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. H
Danmarks Fiskeri-og CEFAS
Havundersøgelser Lowesoft
Nordsøcentret Suffolk
Box 101 England
Denmark

Mr. I. Holmes CEFAS Lowesoft NR33 OHT Suffolk England Mr. A. Newton
Marine Laboratory
Victoria Road
Aberdeen AB9 8DB
Scotland

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. STATE:

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), hydrographical 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

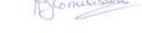
COMPLETE THE FOLLOWING TABLE - SEPERATE PAGE FOR EACH COASTAL STATE

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



# Lydia Cornelissen

(On behalf to the Principal Scientist)

Dated 16-01-2018

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.

