NOTIFICATION OF PROPOSED RESEARCH

PART A : GENERAL

1.	NAME OF RESEARCH SHIP:		Tridens	CRUISE	CRUISE NO: wk.4 t/m 7		
2.	DATES OF CRUISE	FROM	22-1-2018	TO	23-2-2018		

3. <u>OPERATING AUTHORITY</u> *Ministry of infrastructure and environment Rijkswaterstaat Dienst Noordzee Postbus 5807, 2280 HV Rijswijk*

FACSIMILE

4. OWNER

5.	PARTICULARS OF SHIP	NAME	TRII	DENS
		NATIONALITY	Duto	zh
		OVERALL LENGTH	73,5	5 METRES
		MAXIMUM DRAUGHT	5,20	D METRES
		NETT TONNAGE	659	
		POPULSION	DIES	EL
		CALL SIGN	PBVC	
		REGISTRATION PORT (if registered fis		
6.	CREW	NAME OF MASTER		K. Reichgeld
		NUMBER OF CREW		21
7.	SCIENTIFIC PERSONNEL	NAME AND ADDRESS O SCIENTIST IN CHARG	E	R. van Hal Wageningen Marine Research P.O. Box 68, IJmuiden
		TEL/FAX NO		0317-487088/0317-487326
		NO: OF SCIENTISTS		7
8.	GEOGRAPHICAL AREA IN	WHICH SHIP WILL OPER	RATE	(with reference in Latitude & Longitude)
	Southern and Central	North Sea (South of	57°N)

- 9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE: To participate in the ICES coordinated International Bottom Trawl Survey
- 10. DATES AND NAMES OF INTEND PORTS OF CALL:
- UK: Leith or Newcastle (3-4 February 2017), in case of major changes due to weather another English port;

Germany: Depending on weather conditions or malfunctioning of the vessel: Hamburg or Bremen

Denmark: Depending on weather conditions or malfunctioning of the vessel: Esjberg.

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL:

PART B : GENERAL

- 1. <u>NAME OF RESEARCH SHIP</u>: Tridens <u>CRUISE NO</u>: wk. 4t/m 7
- 2. DATES OF CRUISE FROM 22-1-2018 TO 23-2-2018
- 3. a) PURPOSE OF RESEARCH The IBTS is designed to acquire recruitment indices and tuning data for several finfish species. The recruitment indices are used in ICES assessment working groups (herring, North Sea demersal fish, mackerel) and ACOM. Data on spatial and temporal distribution of fish species are used for ecosystem studies. Furthermore to obtain hydrographical data (CTD-stations).

<u>b) GENERAL OPRATIONAL METHODS</u> (including full description of any fishing geartrawl type, mesh size etc.)
In each ICES-rectangle visited a haul will be made with a GOV- Bottom trawl (Grand Ouverture Verticale) with 20 mm cod-end;

In each ICES-rectangle visited, two hauls with a MIK- plankton net (Method Isaac Kitt) will be made;

At each station a downcast with a Seabird- CTD-sonde for hydrographical data will be made.

During the cruise water samples will be taken.

- 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:
- 5. a) TYPES OF SAMPLES REQUIRED eg Geological/Water/Plankton/Fish/Radionuclide:

Fish and benthos samples (GOV) for analysing the fish and benthos community Plankton samples (MIK) for analysing herring larvae. Water 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)

Each GOV station will be fish for 30 minutes with the semi-pelagic GOV bottom trawl. Each MIK station consists of an oblique vertical pelagic haul.

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:

Yearly, since 1965

 b) ANY PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROPOSED CRUISE: Reports of ICES International Bottom Trawl Survey Working Group (IBTSWG). Data is used in many assessments and ecological studies of fish species and -communities. 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:

Staff members of the Fisheries Laboratories at Lowestoft (UK, CEFAS), Aberdeen (UK, Marine Scotland), Boulogne sur Mer (F, Ifremer), Hamburg (G, vTI-SF) and Charlottenlund (DM, DTU-aqua).

Mr. Jim Ellis	Mr. Yves Verin				
CEFAS	IFREMER				
Victoria Road	150, Quai Gambetta				
Suffolk	Boulogne-sur-Mer				
England	France				

Mrs. Anne Sell Johann Heinrich von Thünen-Institute Palmaille 9 Hamburg Germany

Mr. Kai Ulrich Wieland	Mr. Finlay Burns			
DTU Aqua	Marine Scotland			
Science Park	375 Victoria Road			
Hirtshals	Aberdeen			
Denmark	Scotland			

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

YES

c) WHEN RESEARCH DATA FROM THE INTENDED CRUISE IS LIKELY TO BE MADE AVAILABLE TO THE COASTAL STATE AND BY WHAT MEANS

Data will be submitted to the Database at the ICES-secretariat in Copenhagen, where they are available to all participating countries.

PART C: SCIENTIFIC EQUIPMENT

COASTAL STATE

UK

COMPLETE THE FOLLOWING TABLE -SEPERATE PAGE FOR EACH COASTAL STATE

PORT CALL DATES

Leith or NewCastle, possibly other port 3-4 February 2017

INDICATE "YES" OR "NO"

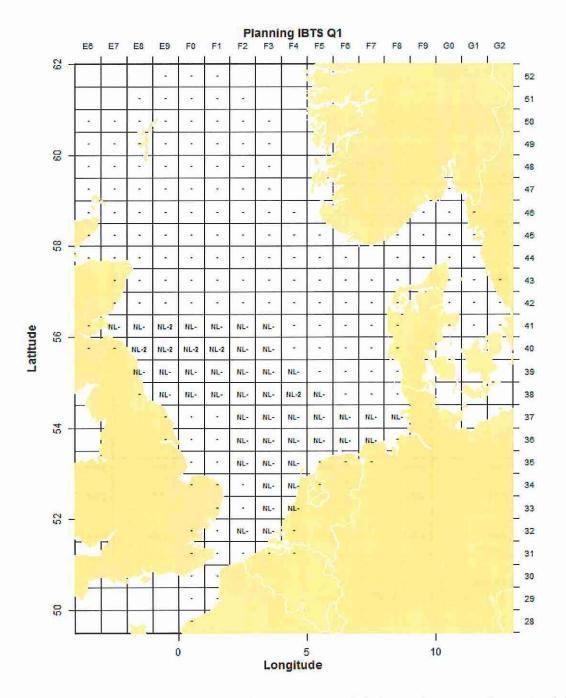
LIST SCIENTIFIC	IST SCIENTIFIC			DISTANCE FROM COAST			
WORK BY							
FUNCTION	WATER	FISHERIES	RESEARCH	WITHIN	WITHIN	BETWEEN	(CONTINENTA
eg: MAGNETOMETRY GRAVITY DIVING SEISMICS BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING WATER SAMPLING U/W T.V. INSTRUMENTS TOWED INSTRUMENTS	COLUMN INCLUDING SEDIMENT SAMPLING OF THE SEABED	RESEARCH WITHIN FISHING LIMITS	CONCERNING THE NATURAL RESOURCES OF THE CONTINENTAL SHELF OR ITS PHYSICAL CHARACTERISTICS	3 NMS	12 NMS	12-200NM	L SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN CONTINENTAL MARGIN
GOV bottom trawl	yes	yes	yes	no	no	yes	yes/no
MIK- Planktonsampler	yes	yes	Yes	no	yes	yes	no
CTD-recorder	ves	yes	Yes	по	yes	yes	no

A.J. Cornelissen

(On behalf to the Principal Scientist)

30th of May 2017 Dated

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



The exact trawl locations are unknown prior to the activities, these are determined based on the local weather conditions and nautical restriction in place at time. The guideline states GOV hauls and MIK hauls have to be done by rectangle. Each rectangle including NL-: one GOV haul and two MIK hauls, NL-2: two GOV hauls and four MIK hauls.