UK

NOTIFICATION OF PROPOSED RESEARCH

PART A : GENERAL

1. NAME OF RESEARCH SHIP: Tridens CRUISE NO: **wk.4 t/m 8**

2. DATES OF CRUISE FROM *20-1-2020* TO *21-2-2020*

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

TELEPHONE *+31 (0)70 - 3366 303* TELEX

FACSIMILE

4. OWNER

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 SCIENTIST IN CHARGE	*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 OPERATE (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 (1-3 February 2020), 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:

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART B : GENERAL

1. NAME OF RESEARCH SHIP: Tridens CRUISE NO: **wk. 4 t/m 8**

2. DATES OF CRUISE FROM ***20-1-2020*** TO ***21-2-2020***

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).***

b) GENERAL OPRATIONAL METHODS (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. 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:

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
CEFAS
Victoria Road
Suffolk
England

Mr. Arnaud Auber
IFREMER
150, Quai Gambetta
Boulogne-sur-Mer
France

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

Mr. Kai Ulrich Wieland
DTU Aqua
Science Park
Hirtshals
Denmark

Mr. Finlay Burns
Marine Scotland
375 Victoria Road
Aberdeen
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. A cruise summary report will be provided to SeaDataNet.

PART C: SCIENTIFIC EQUIPMENT

COASTAL STATE **UK**

COMPLETE THE FOLLOWING TABLE -
SEPERATE PAGE FOR EACH COASTAL STATE

PORT CALL Leith or NewCastle, possibly other port

DATES 1-2 February 2019

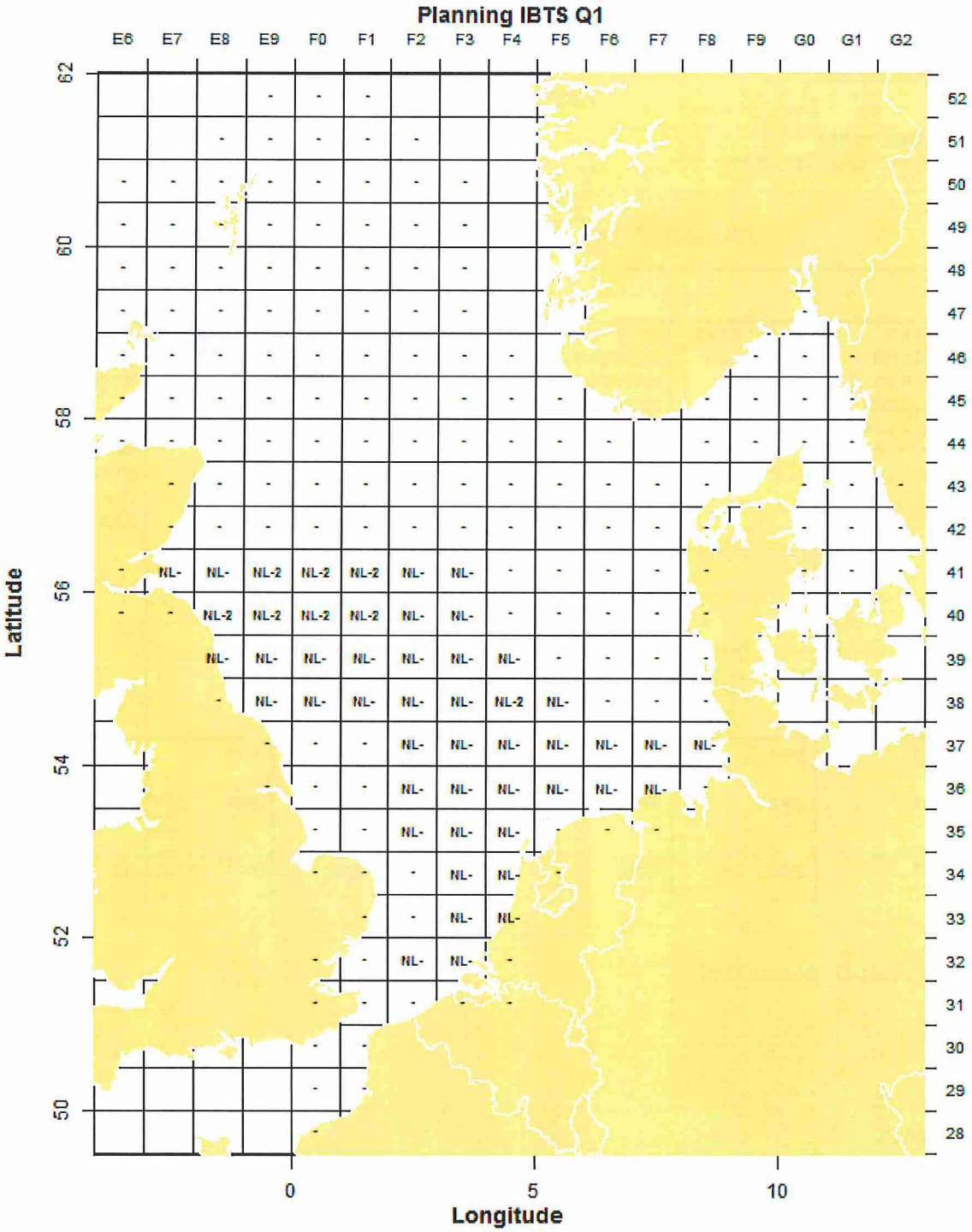
INDICATE "YES" OR "NO"

LIST SCIENTIFIC WORK BY FUNCTION eg: MAGNETOMETRY GRAVITY DIVING SEISMICS BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING WATER SAMPLING U/W T.V. INSTRUMENTS TOWED INSTRUMENTS				DISTANCE FROM COAST			
	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 3 NMS	WITHIN 12 NMS	BETWEEN 12-200NM	(CONTINENTAL 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	*yes*	*yes*	*Yes*	*no*	*yes*	*yes*	*no*

Lydia Cornelissen
(On behalf to the Principal Scientist)

Dated 03-07-2019

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.

Planned station locations, still depending on weather and practical aspects.

Ices	ShootLat	ShootLong
32F2	51.6333	2.8
32F3	51.8361	3.4721
33F3	52.4151	3.384
33F4	52.1495	4.2013
34F3	52.8676	3.1605
34F4	52.6299	4.5279
35F2	53.4426	2.8634
35F3	53.3476	3.6096

Ices	ShootLat	ShootLong
35F4	53.0066	4.2296
36F2	53.7605	2.4451
36F3	53.6538	3.7236
36F4	53.6523	4.5118
36F5	53.8168	5.5516
36F6	53.7688	6.9473
36F7	53.9143	7.2046
37F2	54.1403	2.6513
37F3	54.2167	3.6667
37F4	54.1015	4.8278
37F5	54.25	5.6333
37F6	54.3072	6.4805
37F7	54.2933	7.5055
37F8	54.3642	8.0465
38E9	54.6	-0.55
38F0	54.9118	0.396
38F1	54.8528	1.156
38F2	54.8386	2.5808
38F3	54.658	3.8095
38F4	54.791	4.9456
38F4	54.5667	4.8167
38F5	54.8833	5.2167
39E8	55.3524	-1.1322
39E9	55.228	-0.849
39F0	55.2333	0.5
39F1	55.245	1.4129
39F2	55.1608	2.4726
39F3	55.0655	3.5819
39F4	55.1232	4.0885
40E8	55.878	-1.3205
40E8	55.6333	-1.1333
40E9	55.777	-0.829
40E9	55.9	-0.3333
40F0	55.7602	0.1983
40F0	55.8838	0.5057
40F1	55.7773	1.2336
40F1	55.6	1.7667
40F2	55.7027	2.0072
40F3	55.6548	3.7273
41E7	56.3675	-2.0843
41E8	56.2167	-1.5
41E9	56.3763	-0.4535
41E9	56.1694	-0.7296
41F0	56.272	0.552
41F0	56.228	0.228
41F1	56.072	1.1603
41F1	56.2478	1.3822
41F2	56.2349	2.5219
41F3	56.0833	3.3167