### NOTIFICATION OF PROPOSED RESEARCH

### PART A : GENERAL

1. NAME OF RESEARCH SHIP: TRIDENS

CRUISE NO: wk. 16

2. DATES OF CRUISE FROM

16 April 2018

TO 20 April 2018

3. OPERATING AUTHORITY J.W. Groen

Head of Department Midden

Rijkswaterstaat Dienst Noordzee/ Rijksrederij

Visitors address: Lange Kleiweg 34. 2280 HV Rijswijk

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TELEPHONE +31 (0) 703366303

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E-MAIl Wim. Groen@rws.nl

OWNER (If different from Para 3)

PARTICULARS OF SHIP

NAME

TRIDENS

NATIONALITY

Dutch

OVERALL LENGTH

METRES 73,5

MAXIMUM DRAUGHT

5,20 METRES

NETT TONNAGE

659

POPULSION

DIESEL

CALL SIGN

PBVO

REGISTRATION PORT & NUMBER (if registered fishing vessel)

CREW

NAME OF MASTER

K. Reichgeld

NUMBER OF CREW

21

SCIENTIFIC PERSONNEL

NAME AND ADDRESS OF SCIENTIST IN CHARGE C.J.G. van Damme

Wageningen IMARES P.O. Box 68, IJmuiden

TEL/FAX NO

+ 31 317 480900/487326

NO: OF SCIENTISTS

- BRIEF DESCRIPTION OF PURPOSE OF CRUISE: Downs herring larvae recruitment survey

10. DATES AND NAMES OF INTEND PORTS OF CALL:

None

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL:

None

### NOTIFICATION OF PROPOSED RESEARCH CRUISE

## PART B : GENERAL

1. NAME OF RESEARCH SHIP: TRIDENS CRUISE NO: wk 16

2. DATES OF CRUISE FROM 16-04-2018 TO 20-04-2018

- 3. a) PURPOSE OF RESEARCH To collect data of the distribution of herring larvae and to obtain hydrographical data.
  - b) GENERAL OPRATIONAL METHODS (including full description of any fishing geartrawl type, mesh size etc:)

    Mid water ring trawl, with a 2 m diameter ring and a mesh size of 1.4 cm and 500 µm codend.
- 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. <u>a) TYPES OF SAMPLES REQUIRED</u> eg Geological/Water/Plankton/Fish/Radionuclide:

  Plankton samples for analysing herring larvae.

  The sampler is dragged behind the vessel, while it is lowered down to approximately 5 meters above the bottom and up again.

  The plankton sampler is clearly NOT a bottom gear.
  - 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) By fishing with a plankton sampler.
- 6. DETAILS OF MOORED EQUIPMENT: none

DATES

Laying Recovery Description Depth Latitude Longitude

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:
  This is a new survey but will form part of the yearly herring larvae surveys carried out since 1980
- b) ANY PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROPOSED CRUISE: Report of the ICES workshop on North Sea herring larvae surveys, data needs and execution (WKHERLARS2), Reports of ICES Working Group of International Pelagic Surveys (WGIPS) and Herring Assessment Working Group (HAWG)
- 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 Fishery Laboratory at Lowestoft, Steve Milligan (CEFAS) Staff members of Thuenen Institute at Hamburg, Matthias Kloppmann (TI) Staff members of DTU Aqua at Copenhagen, Bastian Huwer (DTU)

## 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 Arrangements via Wageningen Marine Research, IJmuiden
- c) WHEN RESEARCH DATA FROM THE INTENDED CRUISE IS LIKELY TO BE MADE AVAILABLE TO THE COASTAL STATE AND BY WHAT MEANS

  Cruise report

# PART C: SCIENTIFIC EQUIPMENT

COASTAL STATE

Germany, Denmark,

COMPLETE THE FOLLOWING TABLE - SEPERATE PAGE FOR EACH COASTAL STATE

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 NY	(CONTINENTAL SHELF WORK ONLY)  BEYOND 1 200 NM BUT WITHIN THE CONTINENTAL MARGIN	Beyond3NI
Mid water ring trawl plankton sampler	YES	YES	NO	YES	YES	NO	NO
CTD-recorder	YES	YES	NO	YES	YES	NO	ио

L. Cornelissen-Schaap

(On behalf to the Principal Scientist)

Dated

NB

15 November 2017

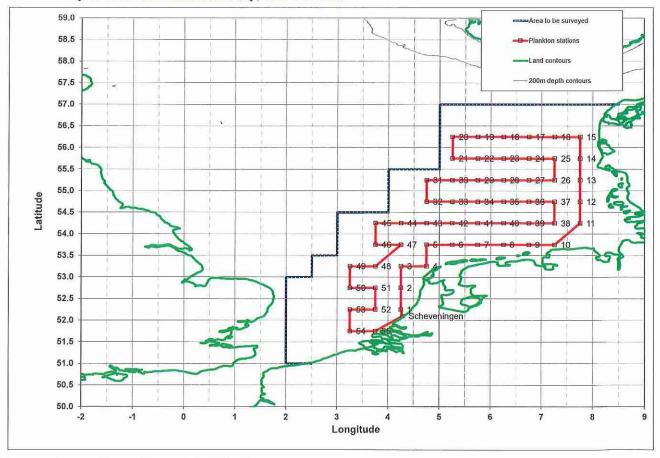
IF ANY DETAILS ARE MATERIALLY CHANGED REGARDING DATES/AREA OF OPERATION AFTER THIS FORM HAS BEEN SUBMITTED THE COASTAL STAE AUTHORITIES MUST BE NOTIFIED IMMEDIATELY.

Proposed station positions week 16 2018

	Latitude	Longitude		
Station	(degrees.minutes)	(degrees.minutes)		
1	52.15	4.15		
2	52.45	4.15		
3	53.15	4.15		
4	53.15	4.45		
5	53.45	4.45		
6	53.45	5.15		
7	53.45	5.45		
8	53.45	6.15		
9	53.45	6.45		
10	53.45	7.15		
11	54.15	7.45		
12	54.45	7.45		
13	55.15	7.45		
14	55.45	7.45		
15	56.15	7.45		
16	56.15	7.15		
17	56.15	6.45		
18	56.15	6.15		
19	56.15	5.45		
20	56.15	5.15		
21	55.45	5.15		
22	55.45	5.45		
23	55.45	6.15		
24	55.45	6.45		
25	55.45	7.15		
26	55.15	7.15		
27	55.15	6.45		
28	55.15	6.15		
29	55.15	5.45		
30	55.15	5.15		
31	55.15	4.45		
32	54,45	4.45		
33	54.45	5.15		
34	54.45	5.45		
35	54.45	6.15		
36	54.45	6.45		
37	54.45	7.15		
38	54.15	7.15		
39	54.15	6.45		
40	54.15	6.15		
41	54.15	5.45		
42	54.15	5.15		
43	54.15	4.45		
44	54.15	4.15		
45	54.15	3.45		
46	53.45	3.45		
47	53.45	4.15		
48	53.15	3.45		
40	23.13	3.43		

Station	Latitude (degrees.minutes)	Longitude (degrees.minutes)
50	52.45	3.15
51	52.45	3.45
52	52.15	3.45
53	52.15	3.15
54	51.45	3.15
55	51.45	3.45

Survey: Downs recruitment survey, Week 16 2018



Proposed sampling grid week 16 2018