NOTIFICATION OF PROPOSED RESEARCH

PART A : GENERAL

1. NAME OF RESEARCH SHIP: ARCA CRUISE NO: wk. 51

2. DATES OF CRUISE FROM 15 December 2019 TO 22 December 2019

3. OPERATING AUTHORITY J.W. Groen

Head of Department Midden

Rijkswaterstaat Dienst Noordzee/ Rijksrederij

Visitors address: Lange Kleiweg 34. 2280 HV Rijswijk

Postal address: Postbus 5807, 2280 HV Rijswijk

<u>TELEPHONE</u> +31 (0) 703366303

FACSIMILE +31 (0) 703366303 E-MAIl Wim.Groen@rws.nl

4. OWNER (If different from Para 3)

5. PARTICULARS OF SHIP NAME ARCA

NATIONALITY Dutch

OVERALL LENGTH 83 METRES

MAXIMUM DRAUGHT 5,50 METRES

NETT TONNAGE 2388

POPULSION DIESEL

CALL SIGN PDHT

REGISTRATION PORT & NUMBER
(if registered fishing vessel)

6. <u>CREW</u> <u>NAME OF MASTER</u> **Peter Jongejan**

NUMBER OF CREW 20

7. SCIENTIFIC PERSONNEL NAME AND ADDRESS OF C.J.G. van Damme

SCIENTIST IN CHARGE Wageningen Marine Research

P.O. Box 68, IJmuiden

TEL/FAX NO + 31 317 480900/487326

NO: OF SCIENTISTS 4

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

 English Channel + Southern North Sea (East of 2°W/South of 53°N)
- 9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE: Herring larvae 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: ARCA CRUISE NO: wk 51
- 2. DATES OF CRUISE FROM 15-12-2019 TO 22-12-2019
- 3. a) PURPOSE OF RESEARCH To collect data of the distribution of herring larvae and to obtain hydrographical data.
 - b) GENERAL OPRATIONAL METHODS fishing geartrawl type, mesh size etc:)
 Gulf VII plankton sampler.
- 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:
 - Yearly, since 1980
 - b) ANY PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROPOSED CRUISE:
 Reports of ICES Working Group on Surveys on Ichthyoplankton in the North Sea and adjacent Seas
 (WGSINS) 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 the Fisheries Laboratories at Lowestoft, Hayden Close (CEFAS) and Boulogne sur Mer, Christophe Loots (IFREMER).
- 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

COMPLETE THE FOLLOWING TABLE - SEPERATE PAGE FOR EACH COASTAL STATE

COASTAL STATE

FRANCE, UK, Belgium

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 NM	(CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN	
Gulf VII planktor sampler	YES	YES	NO	YES	YES	NO	
CTD-recorder	YES	YES	NO	YES	YES	NO	

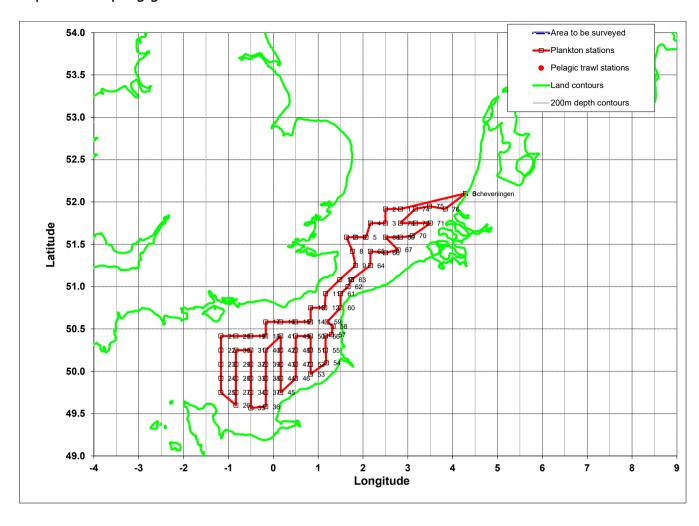
L. Cornelissen-Schaap

(On behalf to the Principal Scientist)

Dated 15 July 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.

Proposed sampling grid week 51 2019



Proposed station positions week 51 2019

Propose	d station	positions	
Station	Latitude	Longitude	
1	51.55	2.50	
2	51.55	2.30	
3	51.45	2.30	
4	51.45	2.10	
5	51.35	2.04	
6	51.35	1.50	
7	51.35	1.38	
8	51.25	1.46	
9	51.15	1.50	
10	51.05	1.29	
11	50.55	1.10	
12	50.45	1.09	
13	50.45	0.50	
14	50.35	0.50	
15	50.35	0.30	
16	50.35	0.10	
17	50.35	-0.10	
18	50.25	-0.10	
19	50.25	-0.30	
20	50.25	-0.50	
21	50.25	-1.10	
22	50.15	-1.10	
23	50.05	-1.10	
24	49.55	-1.10	
25	49.45	-1.10	
26	49.36	-0.50	
27	49.45	-0.50	
28	49.55	-0.50	
29	50.05	-0.50	
30	50.15	-0.50	
31	50.15	-0.30	
32	50.05	-0.30	
33	49.55	-0.30	
34	49.45	-0.30	
35	49.34	-0.30	
36	49.35	-0.10	
37	49.45	-0.10	
38	49.55	-0.10	
39	50.05	-0.10	
40	50.15	-0.10	
41	50.25	0.10	
42	50.15	0.10	
43	50.05	0.10	
44	49.55	0.10	
45	49.45	0.10	

k 51 2019							
	Latitude	Longitude					
46	49.55	0.30					
47	50.05	0.30					
48	50.15	0.30					
49	50.25	0.30					
50	50.25	0.50					
51	50.15	0.50					
52	50.05	0.50					
53	49.58	0.50					
54	50.06	1.11					
55	50.15	1.10					
56	50.25	1.10					
57	50.26	1.18					
58	50.32	1.20					
59	50.35	1.12					
60	50.45	1.30					
61	50.55	1.30					
62	51.00	1.40					
63	51.05	1.45					
64	51.15	2.10					
65	51.25	2.10					
66	51.24	2.30					
67	51.26	2.47					
68	51.35	2.30					
69	51.35	2.50					
70	51.36	3.06					
71	51.45	3.30					
72	51.45	3.10					
73	51.45	2.50					
74	51.55	3.10					
75	51.57	3.29					
76	51.55	3.50					