

APPLICATION FOR A RESEARCH CRUISE WITHIN A COASTAL STATE'S FISHERY LIMITS

A. GENERAL

1. **NAME OF RESEARCH SHIP** DANA **CRUISE NO.** 12/2018
2. **DATES OF CRUISE** **FROM** 12/7 2018 **TO** 27/7 2018
3. **OPERATING AUTHORITY**
3. **OPERATING AUTHORITY** DTU Aqua (National Institute of Aquatic Resources)
Kemitorget, Building 202
DK-2800 Kgs. Lyngby
Telephone: +45 35 88 33 00 Fax.: +45 35 88 33 33 E-mail: aqua@aqu.dtu.dk
4. **OWNER (if different for para.3)**
5. **PARTICULARS OF SHIP**
- | | |
|-------------------------------------|--------------------------------------|
| NAME | DANA |
| NATIONALITY | Danish |
| OVERALL LENGTH (metres) | 80 metres |
| MAXIMUM DRAUGHT (metres) | 6.3 metres |
| NET TONNAGE | 669.53 t |
| METHOD OF PROPULSION | Steam Turbine/Diesel/Diesel Electric |
| CALL SIGN | OXBH |
| REGISTERED PORT & NUMBER | Hirtshals |
| (if reg. fishing vessel) | |
6. **CREW**
- | | |
|-----------------------|---------------|
| NAME OF MASTER | Claus Persson |
| NUMBER OF CREW | 20 |
7. **SCIENTIFIC PERSONNEL**
- | | |
|--|--|
| NAME AND ADDRESS OF SCIENTIST IN CHARGE | Kai Wieland
DTU Aqua
North Sea Science Park
Willemoesvej 2
DK-9850 Hirtshals |
| TEL NO / FAX NO | +45 35 88 33 00 / +45 35 88 33 33 |
| NUMBER OF SCIENTISTS | 5 |
8. **GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE** (with reference in Latitude and Longitude):
54°00'N - 60°00'N , 02°00'W -10°00'E
9. **BRIEF DESCRIPTION OF PURPOSE OF CRUISE:**
IESSNS (International Ecosystem Summer Survey in the Nordic Seas) extended to the North Sea
10. **DATES AND NAMES OF INTENDED PORTS OF CALL:**
NONE
11. **ANY SPECIAL REQUIREMENTS AT PORTS OF CALL:**
NONE

B. DETAIL

1. **NAME OF RESEARCH SHIP** DANA **CRUISE NO.** 12/2018

2. **DATES OF CRUISE** **FROM** 12/7 2018 **T0:** 27/7 2018

3. **PURPOSE OF RESEARCH AND GENERAL OPERATIONAL METHODE**

International Mackerel Trawl Survey. Pelagic Trawling and pelagic sampling.

4. **PLEASE ATTACH CHART** showing, at the appropriate scale the geographical area of the intended work, the areas to be fished, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment etc.:

See enclosed map and station list

5a. **TYPES OF SAMPLES REQUIRED** e.g. Geological/water/plankton/fish. If fishing gear is to be used please indicate what fish stocks will be worked, the maximum quantity required of each species/stock and the quantity of fish to be retained on board:

Fish: Mackerel; Water samples for CTD calibration

5b. **METHODS BY WHICH SAMPLES WILL BE OBTAINED** (e.g. dredging/coring/drilling/fishing etc.)

Pelagic Fishing

6a. **DETAILS OF MOORED EQUIPMENT:**

Dates:	<u>Laying</u>	<u>Recovery</u>	<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>
None					

6b. **FULL DESCRIPTION FOR ALL FISHING GEAR TO BE USED** (e.g. bottom trawl, mesh size, attachments etc.):

Multipelt 832 pelagic trawl (22 mm meshsize in codend)

7. ANY HAZARDOUS MATERIALS e.g. chemicals/explosives/gases/radioactives etc)
(use separate sheet if necessary) None

- (a) TYPE OF TRADE NAME
- (b) CHEMICAL CONTENT (& FORMULA)
- (c) IMO IMDG CODE Reference & UN Number
- (d) QUANTITY & METHODS 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. PLEASE SET OUT DETAILS OF:

(a) ANY RELEVANT PREVIOUS/FUTURE CRUISES:

(b) ANY PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROPOSED CRUISE: (Attach separate sheet if necessary)

9. NAMES AND ADDRESSES OF SCIENTISTS IN COASTAL STATE(S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE:

Jim Ellis	Finlay Burns
CEFAS	Marine Scotland Science
Lowestoft Laboratory	Marine Laboratory
Lowestoft	Aberdeen
UK	UK

10. STATE:

(a) WHETHER VISITS TO THE SHIP IN PORT BY COASTAL STATE SCIENTISTS WILL BE ACCEPTABLE:

YES

(b) WHETHER IT WILL BE ACCEPTABLE TO CARRY ON BOARD AN OBSERVER FOR ANY PART OF THE CRUISE

YES

(If 'yes' please indicate possible dates and ports of embarkation/disembarkation)

By Special arrangement

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

Cruise Summary Report and Working document to ICES WGWIDE spring 2019

If the report will not be available within 12 months of the cruise, please set out, an explanation for the delay indicating when the report will be available.

12. SCIENTIFIC EQUIPMENT

COASTAL STATE: United Kingdom

PORT CALL: None

DATES: 12/7 – 27/7 2018

Complete the following table –
separate copy for each coastal state

Indicate 'yes' or 'no' other than for fishing gear when the total hours of fishing in each zone should be indicated

LIST SCIENTIFIC WORK BY FUNCTION e.g. : Magnetometry Gravity diving Seismics Bathymetry Seabed sampling Trawling Echo sounding Water sampling U/W TV Moored instruments Towed instruments	Water Column	Fisheries Research within fishing limits	Research concerning Continental shelf out of Coastal State's margin	DISTANCE FROM COAST		
				Within 3 NM	Between 3-12 NM	Between 12 and 200 NM
Trawling	Yes	Yes	No	No	No	Yes
Water sampling	Yes	Yes	No	No	No	Yes
CTD	Yes	Yes	No	No	No	Yes
Echo sounding	Yes	Yes	No	No	No	Yes

.....Linda Stuhr Christensen.....

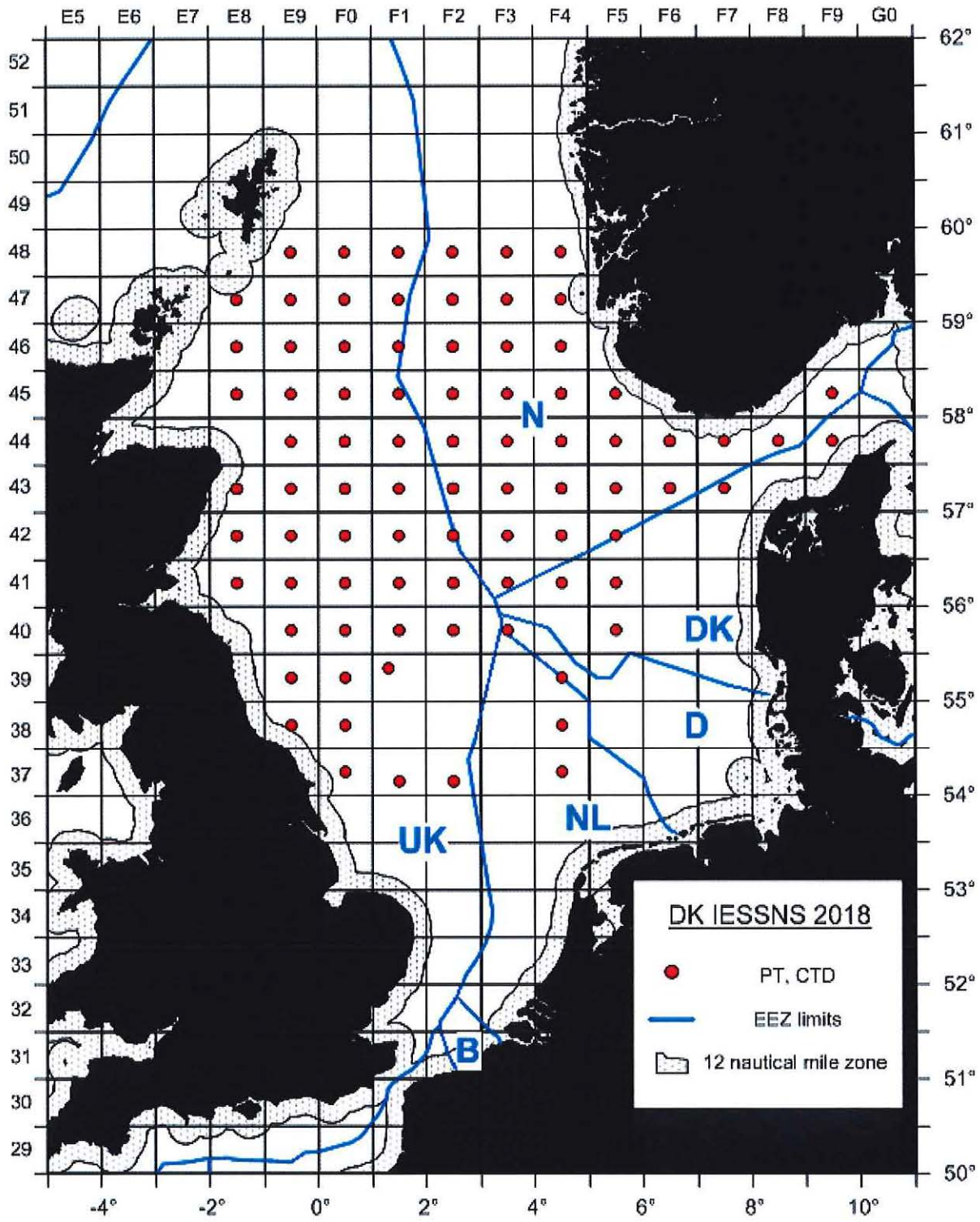


Dated: 7/5-18

(On behalf of the Principal Scientist)

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.

Survey map



Station list

Survey	Year	Quarter	Ship	Gear	StatRec	Lat_Dec	Lon_Dec	Lat_DegMin	Lon_DegMin
IESSNS	2018	3	DAN2	PT,CTD	48E9	59.75	-0.50	59°45' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	48F0	59.75	0.50	59°45' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	48F1	59.75	1.50	59°45' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	48F2	59.75	2.50	59°45' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	48F3	59.75	3.50	59°45' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	48F4	59.75	4.50	59°45' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	47E8	59.25	-1.50	59°15' N	1°30' W
IESSNS	2018	3	DAN2	PT,CTD	47E9	59.25	-0.50	59°15' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	47F0	59.25	0.50	59°15' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	47F1	59.25	1.50	59°15' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	47F2	59.25	2.50	59°15' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	47F3	59.25	3.50	59°15' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	47F4	59.25	4.50	59°15' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	46E8	58.75	-1.50	58°45' N	1°30' W
IESSNS	2018	3	DAN2	PT,CTD	46E9	58.75	-0.50	58°45' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	46F0	58.75	0.50	58°45' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	46F1	58.75	1.50	58°45' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	46F2	58.75	2.50	58°45' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	46F3	58.75	3.50	58°45' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	46F4	58.75	4.50	58°45' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	45E8	58.25	-1.50	58°15' N	1°30' W
IESSNS	2018	3	DAN2	PT,CTD	45E9	58.25	-0.50	58°15' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	45F0	58.25	0.50	58°15' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	45F1	58.25	1.50	58°15' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	45F2	58.25	2.50	58°15' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	45F3	58.25	3.50	58°15' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	45F4	58.25	4.50	58°15' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	45F5	58.25	5.50	58°15' N	5°30' E
IESSNS	2018	3	DAN2	PT,CTD	45F9	58.25	9.50	58°15' N	9°30' E
IESSNS	2018	3	DAN2	PT,CTD	44E9	57.75	-0.50	57°45' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	44F0	57.75	0.50	57°45' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F1	57.75	1.50	57°45' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F2	57.75	2.50	57°45' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F3	57.75	3.50	57°45' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F4	57.75	4.50	57°45' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F5	57.75	5.50	57°45' N	5°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F6	57.75	6.50	57°45' N	6°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F7	57.75	7.50	57°45' N	7°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F8	57.75	8.50	57°45' N	8°30' E
IESSNS	2018	3	DAN2	PT,CTD	44F9	57.75	9.50	57°45' N	9°30' E
IESSNS	2018	3	DAN2	PT,CTD	43E8	57.25	-1.50	57°15' N	1°30' W
IESSNS	2018	3	DAN2	PT,CTD	43E9	57.25	-0.50	57°15' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	43F0	57.25	0.50	57°15' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	43F1	57.25	1.50	57°15' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	43F2	57.25	2.50	57°15' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	43F3	57.25	3.50	57°15' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	43F4	57.25	4.50	57°15' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	43F5	57.25	5.50	57°15' N	5°30' E
IESSNS	2018	3	DAN2	PT,CTD	43F6	57.25	6.50	57°15' N	6°30' E
IESSNS	2018	3	DAN2	PT,CTD	43F7	57.25	7.50	57°15' N	7°30' E
IESSNS	2018	3	DAN2	PT,CTD	42E8	56.75	-1.50	56°45' N	1°30' W
IESSNS	2018	3	DAN2	PT,CTD	42E9	56.75	-0.50	56°45' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	42F0	56.75	0.50	56°45' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	42F1	56.75	1.50	56°45' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	42F2	56.75	2.50	56°45' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	42F3	56.75	3.50	56°45' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	42F4	56.75	4.50	56°45' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	42F5	56.75	5.50	56°45' N	5°30' E
IESSNS	2018	3	DAN2	PT,CTD	41E8	56.25	-1.50	56°15' N	1°30' W
IESSNS	2018	3	DAN2	PT,CTD	41E9	56.25	-0.50	56°15' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	41F0	56.25	0.50	56°15' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	41F1	56.25	1.50	56°15' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	41F2	56.25	2.50	56°15' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	41F3	56.25	3.50	56°15' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	41F4	56.25	4.50	56°15' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	41F5	56.25	5.50	56°15' N	5°30' E
IESSNS	2018	3	DAN2	PT,CTD	40E9	55.75	-0.50	55°45' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	40F0	55.75	0.50	55°45' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	40F1	55.75	1.50	55°45' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	40F2	55.75	2.50	55°45' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	40F3	55.75	3.50	55°45' N	3°30' E
IESSNS	2018	3	DAN2	PT,CTD	40F5	55.75	5.50	55°45' N	5°30' E
IESSNS	2018	3	DAN2	PT,CTD	39E9	55.25	-0.50	55°15' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	39F0	55.25	0.50	55°15' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	39F1	55.25	1.30	55°21' N	1°18' E
IESSNS	2018	3	DAN2	PT,CTD	39F4	55.25	4.50	55°15' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	38E9	54.75	-0.50	54°45' N	0°30' W
IESSNS	2018	3	DAN2	PT,CTD	38F0	54.75	0.50	54°45' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	38F4	54.75	4.50	54°45' N	4°30' E
IESSNS	2018	3	DAN2	PT,CTD	37F0	54.25	0.50	54°15' N	0°30' E
IESSNS	2018	3	DAN2	PT,CTD	37F1	54.15	1.50	54°9' N	1°30' E
IESSNS	2018	3	DAN2	PT,CTD	37F2	54.15	2.50	54°9' N	2°30' E
IESSNS	2018	3	DAN2	PT,CTD	37F4	54.25	4.50	54°15' N	4°30' E