

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

A. GENERAL

1. **NAME OF RESEARCH SHIP** DANA **CRUISE NO.** 07/2018
2. **DATES OF CRUISE** **FROM** 30/7 2018 **TO** 17/8 2018
3. **OPERATING AUTHORITY**
3. **OPERATING AUTHORITY** DTU Aqua (National Institute of Aquatic Resources)
Kemitorvet, Building 202
DK-2800 Kgs. Lyngby
Telephone: +45 35 88 33 00 Fax.: +45 35 88 33 33 E-mail: aqua@aqu.a.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 / Helle Rasmussen
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 | 10 |
8. **GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference in Latitude and Longitude):**
51°00'N - 58°00'N, 02°00'W - 10°00'E
9. **BRIEF DESCRIPTION OF PURPOSE OF CRUISE:**
IBTS (International Bottom Trawl Survey)
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.** 07/2018

2. **DATES OF CRUISE** **FROM** 30/7 2018 **TO:** 17/8 2018

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

International Bottom Trawl Survey. Bottom 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: Herring, cod, haddock, whiting, sprat, Norway pout, mackerel, fish larvae and water

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

Fishing

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

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

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

GOV Bottom trawl (16 mm)

ISAAC-KIDD MIDWATER TRAWL (MIK) and Bongo net: Pelagic fish larvae (5 mm).

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:
NS-IBTS 1981 – 2017

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

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:

ICES DATRAS September 2018, IBTSWG March 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: 30/7 – 17/8 2019

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

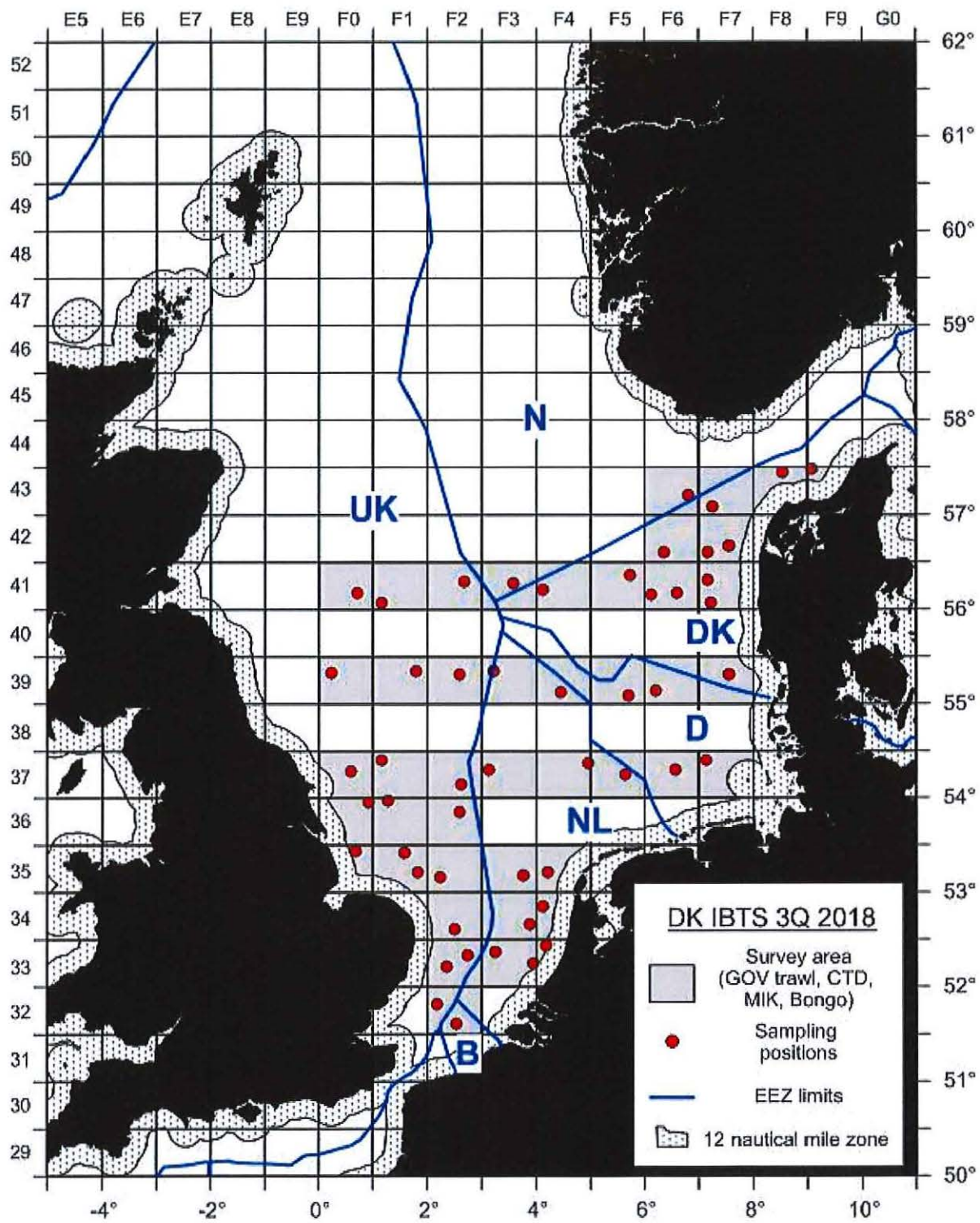
LIST SCIENTIFIC WORK BY FUNCTION e.g. : Magnetometry Gravity diving Seismics Bathymetry Seabed sampling Trawling Echo sounding Water sampling U/W TV Moored instruments Towed instruments	Water Column	Fisheries Research within fishing limits	Research concerning Continental shelf out of Coastal State's 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
MIK and Bongo	Yes	Yes	No	No	No	Yes
Echo sounding	Yes	Yes	No	No	No	Yes

.....Linda Stuhr Christensen.....  Dated: 1/2.18

(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

StatRec	ShootLat	ShootLon	HaulLat	HaulLon	ShootLatDegMin	ShootLonDegMin	HaulLatDegMin	HaulLonDegMin
43F9	57.4870	9.0898	57.4863	9.1518	57° 29.214' N	9° 5.388' E	57° 29.178' N	9° 9.108' E
43F8	57.4540	8.5323	57.4563	8.5938	57° 27.234' N	8° 31.932' E	57° 27.372' N	8° 35.622' E
43F7	57.0950	7.2578	57.1012	7.3180	57° 0.57' N	7° 15.462' E	57° 6.066' N	7° 19.074' E
43F6	57.2126	6.7970	57.1890	6.8455	57° 12.756' N	6° 47.814' E	57° 11.34' N	6° 50.73' E
42F7	56.6019	7.1504	56.5727	7.1806	56° 36.108' N	7° 9.024' E	56° 34.362' N	7° 10.83' E
42F7	56.6769	7.5619	56.7103	7.5705	56° 40.614' N	7° 33.708' E	56° 42.612' N	7° 34.224' E
42F6	56.6009	6.3576	56.6171	6.4096	56° 36.054' N	6° 21.45' E	56° 37.026' N	6° 24.57' E
41F7	56.3037	7.1700	56.2996	7.1103	56° 18.216' N	7° 0.102' E	56° 17.976' N	7° 6.618' E
41F7	56.0677	7.2191	56.0600	7.1610	56° 4.056' N	7° 13.14' E	56° 3.594' N	7° 9.654' E
41F6	56.1827	6.6086	56.1826	6.5493	56° 10.956' N	6° 36.516' E	56° 10.956' N	6° 32.958' E
41F6	56.1498	6.1099	56.1408	6.0551	56° 8.982' N	6° 6.594' E	56° 8.442' N	6° 3.3' E
41F5	56.3595	5.7351	56.3815	5.7787	56° 21.564' N	5° 44.1' E	56° 22.89' N	5° 46.722' E
41F4	56.2074	4.1061	56.2276	4.1547	56° 12.444' N	4° 6.366' E	56° 13.656' N	4° 9.276' E
41F3	56.2805	3.5888	56.2599	3.6354	56° 16.824' N	3° 35.322' E	56° 15.594' N	3° 38.124' E
41F2	56.2861	2.6872	56.2913	2.7452	56° 17.166' N	2° 41.226' E	56° 17.472' N	2° 44.706' E
41F1	56.0681	1.1728	56.0958	1.2060	56° 4.086' N	1° 10.362' E	56° 5.748' N	1° 12.354' E
41F0	56.1669	0.7200	56.1817	0.7766	56° 10.014' N	0° 43.2' E	56° 10.902' N	0° 46.596' E
39F7	55.3178	7.5637	55.3234	7.5064	55° 19.062' N	7° 33.816' E	55° 19.398' N	7° 30.378' E
39F6	55.1395	6.2011	55.1289	6.1463	55° 8.37' N	6° 12.06' E	55° 7.734' N	6° 8.772' E
39F5	55.0898	5.6963	55.1024	5.6445	55° 5.388' N	5° 41.772' E	55° 6.144' N	5° 38.67' E
39F4	55.1298	4.4523	55.1014	4.4230	55° 7.782' N	4° 27.132' E	55° 6.078' N	4° 25.374' E
39F3	55.3552	3.2338	55.3232	3.2172	55° 21.312' N	3° 14.022' E	55° 19.386' N	3° 13.026' E
39F2	55.3078	2.5974	55.2793	2.5675	55° 18.462' N	2° 35.844' E	55° 16.758' N	2° 34.05' E
39F1	55.3543	1.7920	55.3378	1.7416	55° 21.252' N	1° 47.514' E	55° 20.268' N	1° 44.496' E
39F0	55.3325	0.2224	55.3639	0.2025	55° 19.95' N	0° 13.338' E	55° 21.828' N	0° 12.15' E
37F7	54.4094	7.1208	54.3857	7.1609	54° 24.564' N	7° 7.242' E	54° 23.136' N	7° 9.654' E
37F6	54.2957	6.5546	54.3058	6.5003	54° 17.742' N	6° 33.27' E	54° 18.342' N	6° 30.012' E
37F5	54.2474	5.6472	54.2672	5.6020	54° 14.838' N	5° 38.832' E	54° 16.032' N	5° 36.114' E
37F4	54.3668	4.9623	54.3529	4.9107	54° 22.008' N	4° 57.738' E	54° 21.174' N	4° 54.636' E
37F3	54.2927	3.1284	54.3078	3.1794	54° 17.556' N	3° 7.704' E	54° 18.468' N	3° 10.758' E
37F2	54.1401	2.6251	54.1419	2.6815	54° 8.406' N	2° 37.506' E	54° 8.514' N	2° 40.884' E
37F1	54.4069	1.1641	54.3973	1.2187	54° 24.408' N	1° 9.84' E	54° 23.838' N	1° 13.122' E
37F0	54.2834	0.5812	54.3016	0.5322	54° 16.998' N	0° 34.866' E	54° 18.09' N	0° 31.926' E
36F2	53.8483	2.5888	53.8332	2.6396	53° 50.898' N	2° 35.322' E	53° 49.992' N	2° 38.37' E
36F1	53.9673	1.2782	53.9363	1.2977	53° 58.038' N	1° 16.686' E	53° 56.178' N	1° 17.856' E
36F0	53.9458	0.9254	53.9461	0.8676	53° 56.742' N	0° 55.518' E	53° 56.76' N	0° 52.056' E
35F4	53.2169	4.2207	53.2467	4.1982	53° 13.008' N	4° 13.236' E	53° 14.796' N	4° 11.892' E
35F3	53.1801	3.7465	53.1485	3.7646	53° 10.806' N	3° 44.784' E	53° 8.904' N	3° 45.876' E
35F2	53.1665	2.2395	53.1902	2.2059	53° 9.99' N	2° 14.37' E	53° 11.412' N	2° 12.348' E
35F1	53.4124	1.5695	53.4453	1.5822	53° 24.738' N	1° 34.164' E	53° 26.712' N	1° 34.926' E
35F1	53.2202	1.8058	53.1958	1.8434	53° 13.212' N	1° 48.348' E	53° 11.748' N	1° 50.604' E
35F0	53.4440	0.6747	53.4726	0.6726	53° 26.64' N	0° 40.482' E	53° 28.35' N	0° 40.356' E
34F4	52.8550	4.1172	52.8286	4.0853	52° 51.294' N	4° 7.032' E	52° 49.716' N	4° 5.118' E
34F3	52.6706	3.8931	52.6550	3.9414	52° 40.236' N	3° 53.58' E	52° 39.294' N	3° 56.484' E
34F2	52.6113	2.5058	52.5959	2.4572	52° 36.672' N	2° 30.342' E	52° 35.754' N	2° 27.432' E
33F4	52.4399	4.1765	52.4244	4.1290	52° 26.394' N	4° 10.584' E	52° 25.458' N	4° 7.74' E
33F3	52.2501	3.9336	52.2652	3.8851	52° 15' N	3° 56.01' E	52° 15.912' N	3° 53.1' E
33F3	52.3685	3.2650	52.3357	3.2652	52° 22.11' N	3° 1.59' E	52° 20.136' N	3° 15.912' E
33F2	52.3350	2.7437	52.3213	2.6948	52° 2.01' N	2° 44.622' E	52° 19.278' N	2° 41.682' E
33F2	52.2222	2.3662	52.2557	2.3595	52° 13.326' N	2° 21.972' E	52° 15.342' N	2° 21.57' E
32F2	51.8251	2.1630	51.8571	2.1746	51° 49.5' N	2° 9.78' E	51° 51.426' N	2° 10.476' E
32F2	51.6181	2.5394	51.6487	2.5621	51° 41.346' N	2° 8.052' E	51° 40.356' N	2° 8.592' E