

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

A. GENERAL

1. **NAME OF RESEARCH SHIP** DANA **CRUISE NO.** 02/2019
2. **DATES OF CRUISE** **FROM** 31/1-2019 **TO** 18/2-2019
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@aqua.dtu.dk
4. **OWNER (if different for para.3)** DTU Aqua
 Charlottenlund Castle, DK-2920 Charlottenlund
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 Jesper Sandager
NUMBER OF CREW 20
7. **SCIENTIFIC PERSONNEL**
NAME AND ADDRESS OF SCIENTIST IN CHARGE Kai Wieland / Helle Rasmussen
 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):
 54°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.** 02/2019

2. **DATES OF CRUISE** **FROM** 31/1-2019 **T0:** 18/2-2019

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, 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>

None

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

GOV-trawl: Bottom trawl (16 mm meshsize in codend)

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

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 – 2018

- (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
CEFAS Lowestoft Laboratory
Pakefield Road Lowestoft, Suffolk NR330HT
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 IBTSWG 2019, April

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

Complete the following table –
separate copy for each coastal state

DATES:

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

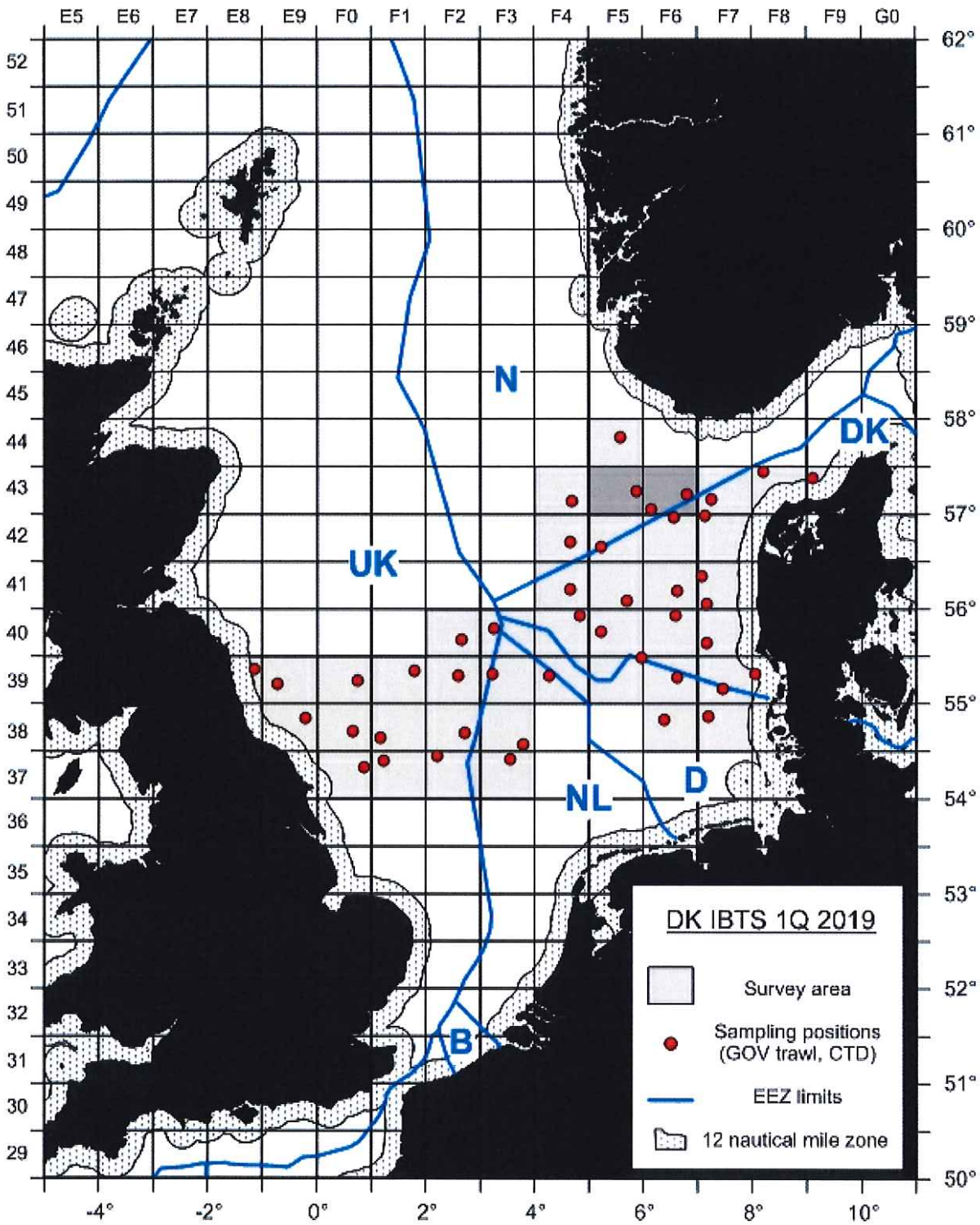
LIST SCIENTIFIC WORK BY FUNCTION e.g. : Magnetometry Gravity diving Seismics Bathymetry Seabed sampling Trawling Echo sounding Water sampling U/W TV Moored instruments Towed instruments	Water Column	Fisheries Research within fishing limits	Research concerning Continental shelf out of Coastal State's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

.....Linda Stuhr Christensen.....
(On behalf of the Principal Scientist)

Dated: 28/8-18

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 GOV:

StatRec	ShootLatDec	ShootLonDec	HaulLatDec	HaulLonDec	StartLatDegMin	StartLonDegMin	EndLatDegMin	EndLonDegMin
44F5	57.8085	5.5762	57.8368	5.5422	57 ° 48.511 'N	5 ° 34.571 'E	57 ° 50.208 'N	5 ° 32.530 'E
43F9	57.3740	9.0950	57.3757	9.0331	57 ° 22.442 'N	9 ° 5.698 'E	57 ° 22.544 'N	9 ° 1.988 'E
43F8	57.4540	8.2123	57.4735	8.2568	57 ° 27.240 'N	8 ° 12.738 'E	57 ° 28.410 'N	8 ° 15.408 'E
43F7	57.1618	7.2623	57.1294	7.2575	57 ° 9.705 'N	7 ° 15.738 'E	57 ° 7.761 'N	7 ° 15.450 'E
43F6	57.0436	6.1403	57.0692	6.1804	57 ° 2.614 'N	6 ° 8.418 'E	57 ° 4.153 'N	6 ° 10.823 'E
43F6	57.2126	6.7970	57.1890	6.8455	57 ° 12.756 'N	6 ° 47.818 'E	57 ° 11.342 'N	6 ° 50.730 'E
43F5	57.2378	5.8815	57.2185	5.9314	57 ° 14.266 'N	5 ° 52.892 'E	57 ° 13.109 'N	5 ° 55.881 'E
43F4	57.1378	4.6914	57.1582	4.6421	57 ° 8.268 'N	4 ° 41.485 'E	57 ° 9.493 'N	4 ° 38.527 'E
42F7	56.9750	7.1273	56.9456	7.0990	56 ° 58.502 'N	7 ° 7.640 'E	56 ° 56.737 'N	7 ° 5.942 'E
42F6	56.9612	6.5571	56.9609	6.4973	56 ° 57.672 'N	6 ° 33.426 'E	56 ° 57.653 'N	6 ° 29.838 'E
42F5	56.6570	5.2226	56.6354	5.2679	56 ° 39.420 'N	5 ° 13.357 'E	56 ° 38.124 'N	5 ° 16.076 'E
42F4	56.7044	4.6584	56.7280	4.6165	56 ° 42.265 'N	4 ° 39.502 'E	56 ° 43.682 'N	4 ° 36.989 'E
41F7	56.3394	7.0745	56.3087	7.0522	56 ° 20.361 'N	7 ° 4.468 'E	56 ° 18.522 'N	7 ° 3.132 'E
41F7	56.0598	7.1658	56.0693	7.2223	56 ° 3.587 'N	7 ° 9.950 'E	56 ° 4.160 'N	7 ° 13.337 'E
41F6	56.1831	6.6144	56.1823	6.5547	56 ° 10.988 'N	6 ° 36.864 'E	56 ° 10.940 'N	6 ° 33.283 'E
41F5	56.0809	5.7083	56.0478	5.7022	56 ° 4.852 'N	5 ° 42.496 'E	56 ° 2.868 'N	5 ° 42.131 'E
41F4	56.2015	4.6553	56.2125	4.6016	56 ° 12.092 'N	4 ° 39.318 'E	56 ° 12.752 'N	4 ° 36.098 'E
40F7	55.6441	7.1708	55.6122	7.1906	55 ° 38.645 'N	7 ° 10.247 'E	55 ° 36.729 'N	7 ° 11.436 'E
40F6	55.9247	6.5937	55.9105	6.6465	55 ° 55.484 'N	6 ° 35.622 'E	55 ° 54.631 'N	6 ° 38.789 'E
40F5	55.7618	5.2351	55.7535	5.1787	55 ° 45.705 'N	5 ° 14.103 'E	55 ° 45.209 'N	5 ° 10.721 'E
40F4	55.9395	4.8274	55.9709	4.8428	55 ° 56.372 'N	4 ° 49.641 'E	55 ° 58.253 'N	4 ° 50.569 'E
40F3	55.8002	3.2581	55.7777	3.2149	55 ° 48.014 'N	3 ° 15.488 'E	55 ° 46.663 'N	3 ° 12.891 'E
40F2	55.6781	2.6533	55.6623	2.6018	55 ° 40.687 'N	2 ° 39.198 'E	55 ° 39.738 'N	2 ° 36.110 'E
39F8	55.3104	8.0717	55.2904	8.0261	55 ° 18.626 'N	8 ° 4.302 'E	55 ° 17.421 'N	8 ° 1.566 'E
39F7	55.1643	7.4743	55.1350	7.4458	55 ° 9.857 'N	7 ° 28.455 'E	55 ° 8.098 'N	7 ° 26.748 'E
39F6	55.2835	6.6249	55.3167	6.6228	55 ° 17.010 'N	6 ° 37.496 'E	55 ° 19.003 'N	6 ° 37.369 'E
39F5	55.4927	5.9830	55.4605	5.9766	55 ° 29.563 'N	5 ° 58.981 'E	55 ° 27.631 'N	5 ° 58.598 'E
39F4	55.2916	4.2587	55.3117	4.3048	55 ° 17.494 'N	4 ° 15.521 'E	55 ° 18.700 'N	4 ° 18.289 'E
39F3	55.3142	3.2105	55.3460	3.2295	55 ° 18.854 'N	3 ° 12.632 'E	55 ° 20.760 'N	3 ° 13.771 'E
39F2	55.3033	2.5927	55.2754	2.5638	55 ° 18.197 'N	2 ° 35.559 'E	55 ° 16.521 'N	2 ° 33.827 'E
39F1	55.3532	1.7879	55.3365	1.7388	55 ° 21.192 'N	1 ° 47.273 'E	55 ° 20.188 'N	1 ° 44.328 'E
39F0	55.2441	0.7450	55.2138	0.7211	55 ° 14.645 'N	0 ° 44.697 'E	55 ° 12.825 'N	0 ° 43.268 'E
38F7	54.8640	7.1869	54.8706	7.1316	54 ° 51.838 'N	7 ° 11.215 'E	54 ° 52.234 'N	7 ° 7.898 'E
38F6	54.8322	6.4004	54.8415	6.3445	54 ° 49.932 'N	6 ° 24.024 'E	54 ° 50.490 'N	6 ° 20.670 'E
38F3	54.5729	3.7906	54.5396	3.7850	54 ° 34.374 'N	3 ° 47.433 'E	54 ° 32.373 'N	3 ° 47.099 'E
38F2	54.6923	2.7037	54.6616	2.6860	54 ° 41.539 'N	2 ° 42.219 'E	54 ° 39.697 'N	2 ° 41.159 'E
38F1	54.6396	1.1533	54.6144	1.1911	54 ° 38.376 'N	1 ° 9.195 'E	54 ° 36.865 'N	1 ° 11.465 'E
38F0	54.7165	0.6609	54.7147	0.7165	54 ° 42.992 'N	0 ° 39.654 'E	54 ° 42.883 'N	0 ° 42.988 'E
37F3	54.4146	3.5397	54.3825	3.5217	54 ° 24.878 'N	3 ° 32.383 'E	54 ° 22.947 'N	3 ° 31.304 'E
37F2	54.4527	2.2215	54.4513	2.1641	54 ° 27.160 'N	2 ° 13.289 'E	54 ° 27.078 'N	2 ° 9.847 'E
37F1	54.3931	1.2354	54.4050	1.1820	54 ° 23.584 'N	1 ° 14.125 'E	54 ° 24.301 'N	1 ° 10.921 'E
37F0	54.3380	0.8725	54.3490	0.8184	54 ° 20.282 'N	0 ° 52.350 'E	54 ° 20.939 'N	0 ° 49.106 'E
39E9	55.2170	-0.7250	55.2450	-0.7210	55 ° 13.020 'N	0 ° 43.500 'W	55 ° 14.700 'N	0 ° 43.260 'W
38E9	54.8552	-0.2176	54.8398	-0.2674	54 ° 51.314 'N	0 ° 13.055 'W	54 ° 50.385 'N	0 ° 16.045 'W
39E8	55.3711	-1.1537	55.3992	-1.1823	55 ° 22.264 'N	1 ° 9.222 'W	55 ° 23.949 'N	1 ° 10.937 'W