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

A.	GE	N	El	RA	I

1. NAME OF RESEARCH SHIP DANA

CRUISE NO.

02/2018

2. DATES OF CRUISE

FROM 1/2 2018

TO 19/2 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@aqua.dtu.dk

4. OWNER (if different for para.3)

SCIENTIFIC PERSONNEL

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

R Hirtshals

20

10

(if reg. fishing vessel)

6. CREW

NAME OF MASTER

Claus Persson

NUMBER OF CREW

R OF CREW

NAME AND ADDRESS OF SCIENTIST IN CHARGE

Kai Wieland / Helle Rasmussen Kai Wieland / Helle Rasmussen

SCIENTIST IN CHARGE

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

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.

02/2018

2. DATES OF CRUISE

FROM

1/2 2018

T0: 19/2 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, 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:

Laying

Recovery

**Description** 

Latitude

Longitude

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 seperate 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
3.	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
).	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
	Lowestoft
	UK
(0.	STATE:
	(a) WHETHER <u>VISITS TO THE SHIP</u> 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 2018, 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

Complete the following table – separate copy for each coastal state

COASTAL STATE: United Kingdom

PORT CALL: None

DATES:

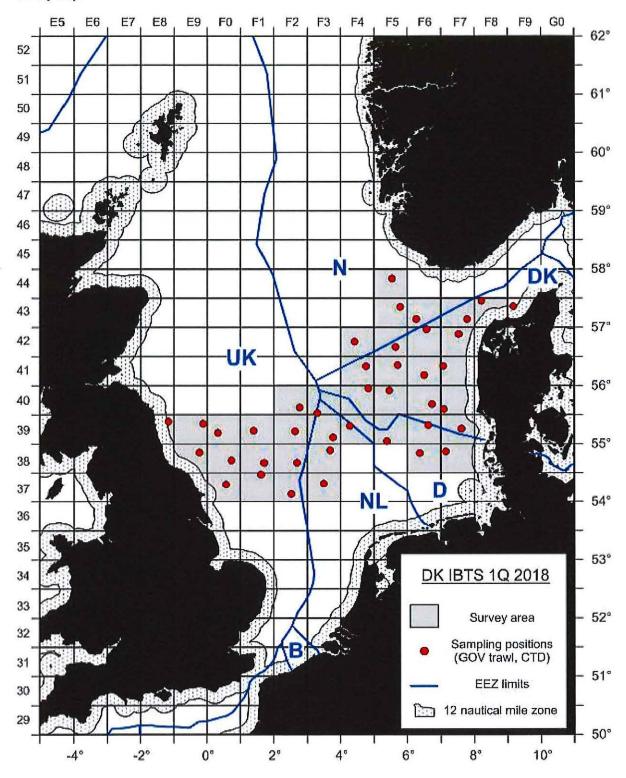
## Indicate 'yes' or 'no' other than for fishing gear when the total hours of fishing in each zone should be indicated

LIST SCIENTIFIC	IST SCIENTIFIC				DISTANCE FROM COAST					
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	Within 3 NM	Between 3-12 NM	Between 12 and 200 NM				
Trawling Water sampling CTD MIK Echo sounding	Yes Yes Yes Yes Yes	Yes Yes Yes Yes	No No No No	No No No No	No No No No	Yes Yes Yes Yes				

Linda Stuhr Christensen Dated: 28/9-17

(On behalf of the Principal Scientist)

Survey map:



# Station list GOV:

StatRec	ShootLatDec	ShootLonDec	HaulLatDec	HaulLonDec	ShootLatDegMi	n	ShootLonDegMi	n	HaulLatDegMin		HaulLonDegMin	1
44F5	57.8355	5.5431	57.8081	5.5773	57° 50.13'	N	5° 32.586'	Ε	57° 48.486'	N	5° 34.638'	E
43F9	57.3613	9.1668	57.3708	9.1099	57° 21.678'	N	9° 10.008'	Ε	57° 22.248'	N	9° 6.594'	E
43F8	57.4541	8.2123	57.4735	8.2568	57° 27.246'	N	8° 12.738'	E	57° 28.41'	N	8° 15.408'	E
43F7	57.1395	7.7823	57.1392	7.7225	57° 8.37'	N	7° 46.938'	E	57° 8.352'	N	7° 43.35'	E
43F6	57.1402	6.2724	57.1606	6.2258	57° 8.412'	N	6° 16.344'	E	57° 9.636'	N	6° 13.548'	E
43F5	57.3513	5.7924	57.3610	5.7325	57° 21.078'	N	5° 47.544'	E	57° 2.166′	N	5° 43.95'	E
42F7	56.8846	7.5329	56.8541	7.5073	56° 53.076'	N	7° 31.974'	E	56° 51.246'	N	7° 30,438'	E
42F6	56.9631	6.5712	56.9606	6.5089	56° 57.786'	N	6° 34.272'	Е	56° 57.636'	N	6° 30.534'	E
42F5	56.6632	5.6503	56.6449	5.6943	56° 39.792'	N	5° 39.018'	E	56° 38.694'	N	5° 41.658'	E
41F7	56.3369	7.0716	56.3071	7.0492	56° 20.214'	N	7° 4.296'	Е	56° 18.426'	N	7° 2.952'	E
41F6	56.1806	6.5050	56.1827	6.5647	56° 10.836'	N	6° 3.03'	Ε	56° 10.962'	N	6° 33.882'	E
41F5	56.3528	5.7141	56.3724	5.7589	56° 21.168′	N	5° 42.846'	Ε	56° 22.344'	N	5° 45.534'	E
41F4	56.3328	4.7605	56.3292	4.8218	56° 19.968'	N	4° 45.63'	E	56° 19.752'	N	4° 49.308'	E
40F7	55.5972	7.0899	55.5640	7.0783	55° 35.832'	N	7° 5.394'	E	55° 3.384'	N	7° 4.698'	E
40F6	55.6823	6.7313	55.6745	6.7875	55° 40.938'	N	6° 43.878'	Ε	55° 40.47'	N	6° 47.25'	E
40F5	55.9164	5.4608	55.8976	5.5079	55° 54.984'	N	5° 27.648'	E	55° 53.856'	N	5° 30.474'	E
40F4	55.9523	4.8305	55.9199	4.8324	55° 57.138'	N	4° 49.83'	Ε	55° 55.194'	N	4° 49.944'	E
39F7	55.2596	7.6156	55.2717	7.5964	55° 15.576'	N	7° 36.936'	Е	55° 16.302'	N	7° 35.784'	E
39F6	55.3198	6.6239	55.2862	6.6208	55° 19.188'	N	6° 37.434'	E	55° 17.172'	N	6° 37.248'	Ε
39F5	55.0475	5.3886	55.0669	5.4312	55° 2.85'	N	5° 23.316'	E	55° 4.014'	N	5° 25.872'	E
39F4	55.3084	4.2791	55.2863	4.2345	55° 18.504'	N	4° 16.746'	E	55° 17.178'	N	4° 14.07'	E
39F3	55.1117	3.7772	55.0871	3.7401	55° 6.702'	N	3° 46.632'	Е	55° 5.226'	N	3° 44.406'	E
39F0	55.1891	0.3228	55.1710	0.3001	55° 11.346'	N	0° 19.368'	E	55° 1.026'	N	0° 18.006'	E
38F7	54.8683	7.1498	54.8749	7.1975	54° 52.098'	N	7° 8.988'	E	54° 52.494'	N	7° 11.85'	E
38F6	54.8412	6.3757	54.8241	6.4254	54° 50.472'	N	6° 22.542'	Е	54° 49.446'	N	6° 25.524'	E
38F3	54.8884	3.6889	54.8582	3.6678	54° 53.304'	N	3° 41.334'	E	54° 51.492'	N	3° 40.068'	E
38F2	54.6732	2.6943	54.6408	2.6913	54° 40.392'	N	2° 41.658'	E	54° 38.448'	N	2° 41.478'	E
38F1	54.6729	1.7114	54.6441	1.6959	54° 40.374'	N	1° 42.684'	Е	54° 38.646'	N	1° 41.754'	E
38F0	54.7156	0.7321	54.7166	0.6761	54° 42.936'	N	0° 43.926'	E	54° 42.996'	N	0° 40.566'	E
37F3	54.3128	3.4948	54.2800	3.5022	54° 18.768'	N	3° 29.688'	E	54° 0.168'	N	3°30.132'	E
37F2	54.1329	2.5223	54.1374	2.5775	54° 7.974'	N	2° 31.338'	E	54° 8.244'	N	2° 34.65'	E
37F1	54.4703	1.6190	54.4501	1.6642	54° 28.218'	N	1° 3.714'	E	54° 27.006'	N	1° 39.852'	E
37F0	54.2975	0.5687	54.2715	0.6052	54° 17.85'	N	0° 34.122'	E	54° 16.29'	N	0° 36.312'	E
39E9	55.3456	-0.1167	55.3375	-0.1531	55° 20.736'	N	0° 7.002'	w	55° 20.25'	N	0° 9.186'	v
38E9	54.8518	-0.2294	54.8363	-0.2810	54° 51.108'	N	0° 13.764'	w	54° 50.178'	N	0° 1.686'	V
39E8	55.3833	-1.1662	55.3543	-1.1387	55° 22.998'	N	1° 9.972'	w	55° 21.258'	N	1° 8.322'	v
12F4	56.7545	4.4190	56.7698	4.4722	56° 45.27'	N	4° 2.514'	Ε	56° 46.188'	N	4° 28.332'	E
10F2	55.6243	2.7705	55.6463	2.7681	55° 37.458'	N	2° 46.23'	E	55°38.778'	N	2° 46.086'	E
10F3	55.5270	3.3007	55.5588	3.2861	55° 3.162'	N	3° 18.042'	Е	55° 33.528'	N	3° 17.166′	E
39F1	55.2269	1.4011	55.2593	1.4227	55° 13.614'	N	1° 24.066'	Е	55° 15.558'	N	1° 25.362'	E
39F2	55.2163	2.6333	55.2141	2.5744			2° 37.998'		55° 12.846'	N	2° 34.464'	