Application for Consent to conduct
Marine Scientific Research

Date: _____16/7 – 16/8 2018

1. General Information

1.1 Cruise name and/or number:
Cruise no. 2018617: International Bottom Trawl Survey (IBTS) q3 and Hydrographic cross-section: Utsira West – Aberdeen – Hanstholm (DK).

1.2 Sponsoring Institution(s):	
Name:	Institute of Marine Research
Address:	P.O Box 1870 Nordnes, 5817 Bergen, Norway.
Name of Director:	Sissel Rogne

1.3 Scientist in charge of the Project:	
Name:	Jon Egil Skjaeraasen
Country:	Norway
Affiliation:	Project leader IBTS Norway
Address:	P.O. Box 1870 Nordnes, 5817 Bergen, Norway
Telephone:	+47 90259201
Fax:	
Email:	jones@hi.no
Website (for CV and photo):	www.hi.no

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	
Affiliation:	
Address:	
Telephone:	
Fax:	
Email:	
Website (for CV and photo):	

2. Description of Project

2.1 Nature and objectives of the project:
International Bottom Trawling Survey that is a cooperation between several nations (e.i. Scotland, England, Germany, Sweden, Netherlands and Denmark) coordinated by ICES and IBTS working group. It maps 15 demersal and 3 pelagic fish species to be used in ICES stock assessment programs. Other species living at or near the bottom, including benthos, sampling from hydrographic data as well as litter is registered. Norway has been allocated certain areas. The Utsira W –Hanstholm - Aberdeen hydrographic cross – section surveying climate and plankton in the North Sea and Skagerrak area. It samples Hydrographic data from regular hydrographical cross-sections as well as water chemistry, plankton, fish eggs and fish larvae as well as microplastic from Utsira West (starting point), Hanstholm (Denmark) to Aberdeen.

2.2 If designated as part of a larger scale project, then provide the name of the project and the Organisation responsible for coordinating the project:
IBTS – International Bottom Trawl Survey, coordinated by ICES – International Council for the Exploration of the Sea. The cross – section is 4th of 4 planned successive years for Institute of Marine Research, Norway.

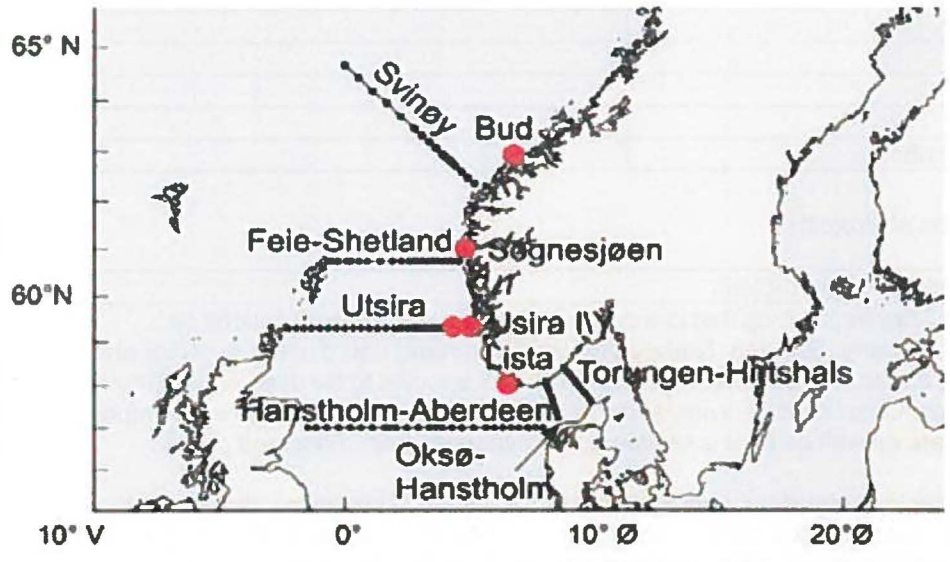
2.3 Relevant previous or future research projects:
IBTS will continue a yearly basis. The cross section has its final year in 2018.

2.4 Previous publications relating to the project:
http://www.ices.dk/community/groups/Pages/IBTSWG.aspx

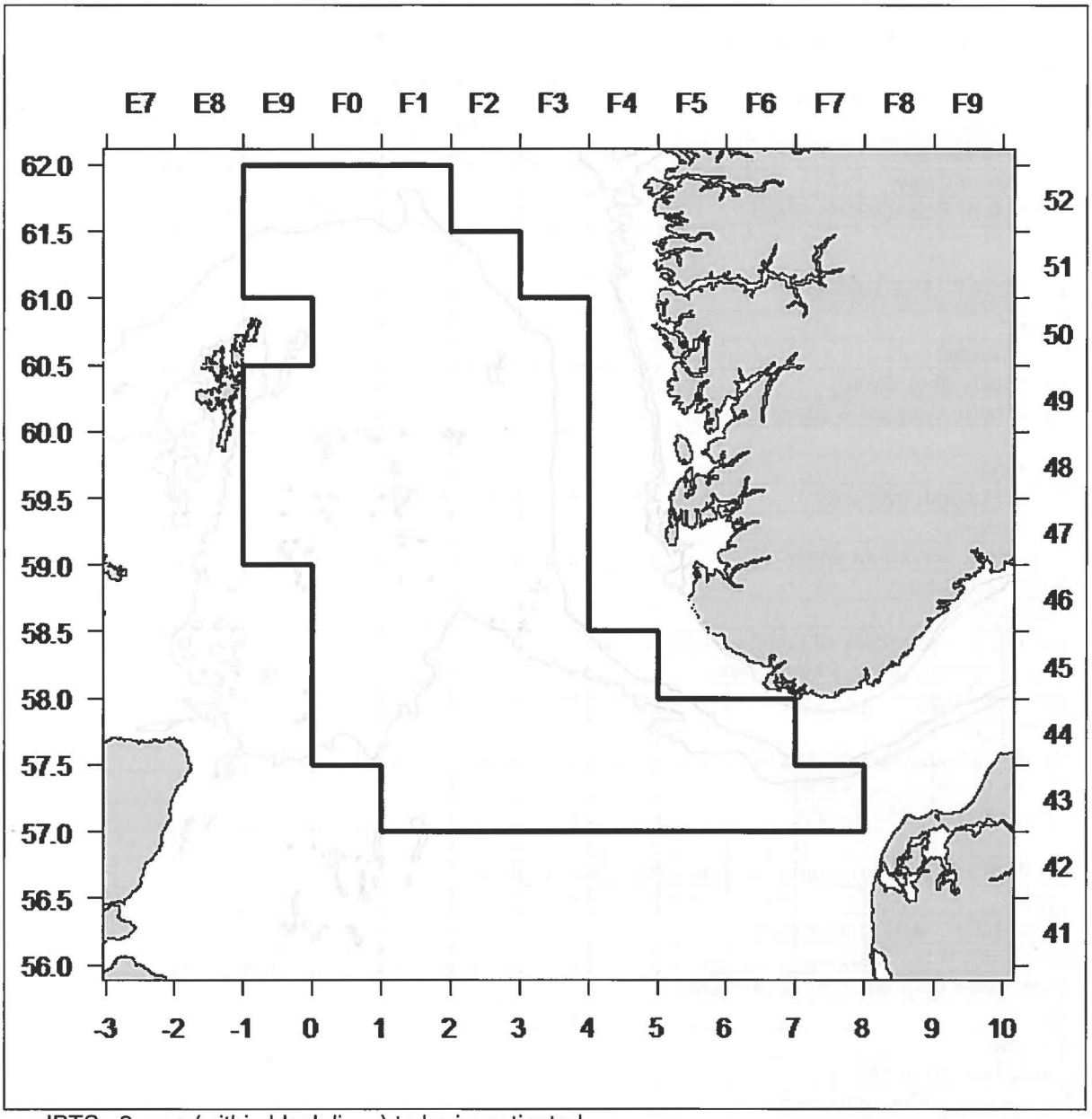
3. Geographical Areas

3.1 Indicate geographical areas in which the project is to be conducted (with reference in Latitude and longitude in decimal degrees, including coordinates of cruise/track/way points/sampling stations). Please provide coordinates in a separate excel spreadsheet.
The whole area to be covered is within 57°N - 62°N, -3°W-8°E. For the IBTS part of the survey, there are 49 squares to be covered by Norway. There is one 30 min haul to be carried out in 46 of these squares and 2 30 min hauls in 3 of the squares, giving a total of 52 30 min hauls. The coordinates of these tows are supposed to be randomized according to IBTS protocol, and predetermined coordinates would therefore breach with the scientific means of the survey. For the cross sections, there are predetermined stations, and these are attached in two separate excel sheets, one for each cross section.

3.2 Attach chart(s) at an appropriate scale (1 page, high-resolution) showing the geographical Areas of the intended work and, as far as practicable, the location and depth of sampling Stations, the tracks of survey lines, and the locations of installations and equipment.



Only the two lower lines (Hanstholm – Aberdeen and Utsira) are to be covered by this survey.



IBTS q3 area (within black lines) to be investigated.

4. Methods and means to be used

4.1 Particulars of vessel:	
Name:	Kristine Bonnevie
Type/Class:	Research vessel
Nationality (Flag State):	Norway
Identification Number (IMO/Lloyds No.):	9062934
Owner:	Institute of Marine Research
Operator:	Institute of Marine Research
Overall length (meters):	56.75 metres
Maximum draught:	6,6 m
Displacement/Gross Tonnage:	1444 brt
Propulsion:	Diesel
Cruising & maximum speed:	10 & 13 knots

Call sign:	
INMARSAT number and method and capability of communication (including emergency frequencies):	Phone: +47 55 90 64 20 Iridium: +881 631 413 517 e-mail: kbonnevie@hi.no
Name of Master:	Tom Ole Drange
Number of Crew:	16
Number of Scientists on board:	17 for entire survey, max 8 at any time

4.2 Particulars of Aircraft:	
Name:	
Make/Model:	
Nationality (flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall Length (meters):	
Propulsion:	
Cruising & Maximum speed:	
Registration No.:	
Call Sign:	
Method and capability of communication (including emergency frequencies):	
Name of Pilot:	
Number of crew:	
Number of scientists on board:	
Details of sensor packages:	
Other relevant information:	

4.3 Particulars of Autonomous Underwater Vehicle (AUV):	
Name:	
Manufacturer and make/model:	
Nationality (Flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall length (meters):	
Displacement/Gross tonnage:	
Cruising & Maximum speed:	
Range/Endurance:	
Method and capability of communication (including emergency frequencies):	
Details of sensor packages:	
Other relevant information:	

4.4 other craft in the project, including its use:

4.5 Particulars of methods and full description of scientific instruments to be used (for fishing gear specify type and dimension)		
Types of samples and Measurements:	Methods to be used:	Instruments to be used:
Demersal fish and other species,	Bottom trawling	GOV (Grande Overture Vertical) bottom trawl. http://www.sciencedirect.com/science/article/pii/S0165783612000525

benthos and litter		
Fish larvae	Trawling in water column	MIK (Methot Isaac Kidd) 2 m net opening, 13 m length
Vertical distribution of Plankton	Trawling in water column	Mocness (Multiple Opening/Closing Net and Environmental sensing system) Wiebe (1976) and Wiebe et al. (1985)
Plankton	Trawling in water column	WP 2 and WP3 (plankton net) 56 and 113 cm in diameter respectively.

4.6 Indicate nature and quantity of substances to be released into the marine environment:
Entellan new Ethanol 96%

4.7 Indicate whether drilling will be carried out. If yes, please specify:
Not applicable

4.8 Indicate whether explosives will be used. If yes, please specify type and trade name, Chemical content, depth of trade class and stowage, size, depth of detonation, frequency of Detonation, and position in latitude and longitude:
Not applicable

5. Installations and Equipment

Details of installations and equipment (including dates of laying, servicing, method and Anticipated timeframe for recover, as far as possible exact locations and depth, and Measurements):
Not applicable

6. Dates

6.1 Expected dates of first entry into and final departure from the research area by the research vessel and/or other platforms:
16/7 – 16/8 2018
6.2 Indicate if multiple entries are expected:
Yes- multiple entries are expected.

7. Port Calls

7.1 Dates and Names of intended ports of call:
Lerwick, Kirkwall or Aberdeen in the period of 16/7 – 16/8 2018 in case of bad weather and or bunkering. We are not able to set any specific dates for this unfortunately.

7.2 Any special logistical requirements at ports of call:
None

7.3 Name/Address/Telephone of shipping agent (if available):

Institute of Marine Research,

8. Participation of the representative of the coastal State

8.1 Modalities of the participation of the representative of the coastal State in the research Project:

8.2 Proposed dates and ports for embarkation/disembarkation:

9. Access to Data, Samples and Research Results

9.1 Expected dates of submission to coastal State of preliminary report, which should include The expected dates of submission of the data and research results:
Survey report to be finished 6 months after survey are finished (16th February 2019)

9.2 Anticipated dates of submission to the coastal State of the final report:
Survey report to be finished 6 months after survey are finished (16th February 2019)

9.3 Proposed means for access by coastal State to data (including format) and samples:
Data to be uploaded to Datras (ICES database) by 25th sept. Data available from then.

9.4 Proposed means to provide coastal State with assessment of data, samples and Research results:

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples And research results:

9.6 Proposed means of making results internationally available:
Avaiable through ICES from 25th sept.

10. Other permits Submitted

10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:
Attachment 1: corrdinates of stations in Cross-section Hanstholm-Aberdeen
Attachment 2: coordinates of stations on the Utsira W cross-section

Signature: Trine Haugen

Contact information of the focal point:

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