## Application for Consent to conduct Marine Scientific Research

Date: _24.04.2014		
1. General Information		
1.1 Cruise name and/or number:		
2014210		
2014210		
1.2 Sponsoring Institution(s):		
Name:	Institute of Marine Research	
Address:	P.O.Box 1870 Nordnes	
	N-5024 Bergen Norway	
Name of Director:	Tore Nepstad	
	•	
1.3 Scientist in charge of the Project:		
Name:	Jennifer Devine	
Country:	Norway	
Affiliation:	Institute of Marine Research	
Address:	P.O.Box 1870 Nordnes	
	N-5024 Bergen Norway	
Telephone:	+47 90259201	
Fax:	+47 55238500	
Email:	jennifer.devine@imr.no	
Website (for CV and photo):	NA	
147 (17)	1. 4 1 . 64	
1.4 Entity(ies)/Participant(s) from coastal State involv	ved in the planning of the project:	
Name:		
Affiliation: Address:		
Telephone:		
Fax:		
Email:		
Website (for CV and photo):		
Website (for ev and photo).	_L	
2. Description of Project		
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2.1 Nature and objectives of the project:		
Acoustic surveys for herring and saithe. IBTS, Interna	ational Bottom Trawl Survey, coordinated by ICES,	
which estimates indexes for demersal species, such as	s cod, whiting, plaice, etc., and benthic invertebrates.	
Hydrographical transect. Process/larval studies.		
Survey dates: 29.06–29.07		
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:		
International bottom trawl survey (IBTS), organized by the IBTSWG (ICES); International herring acoustic		
survey, organized by HERAS (ICES).		

2.3 Relevant previous or future research projects:
The herring acoustics and IBTS surveys have been undertaken for several decades, the saithe survey since

1995, the hydrographic transect is routine.

2.4 Previous publications relating to the project:

### 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.

Survey area covers: 56°N - 62° N, 08°E - 02° W

Utsira W – Start Point hydrographic transect (straight line along 59.283333)

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.

See Figures for map of IBTS and HERAS survey areas with Norway's obligatory sampling rectangles. There are two attached maps for the bottom trawl survey area. The ICES WG has not yet approved the proposed changes to the survey area. If it does, the map in Figure 3 will be used.

#### 4. Methods and means to be used

4.1 Particulars of vessel:		
Name:	Johan Hjort	
Type/Class:	Research vessel	
Nationality (Flag State):	Norwegian	
Identification Number (IMO/Lloyds No.):	8915768	
Owner:	Institute of Marine Research/University of Bergen	
Operator:	Institute of Marine Research	
Overall length (meters):	64.5	
Maximum draught:	6.5	
Displacement/Gross Tonnage:	548/1851 tons	
Propulsion:	Diesel	
Cruising & maximum speed:	10-12 knots, 12.7 knots	
Call sign:	LDGJ	
INMARSAT number and method and capability	Telephone: +47 55906400	
of communication (including emergency	Telefax:: +47 55906401	
frequencies):	E-mail: johan.hjort@imr.no	
Name of Master:	Tommy Steffensen / John Gerhard Aasen	
Number of Crew:	15	
Number of Scientists on board:	12	

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:

	d full description of scientific instruments	s to be used(for fishing gear specify
type and dimension)		
Types of samples and	Methods to be used:	Instruments to be used:
Measurements:		
Fish	Bottom and midwater trawls	GOV/Lakse/Åkra/Campelen
		trawls
Fish larvae, eggs	Midwater	MIK trawl
Plankton, water, algae	Midwater trawl, water collection	WP2, CTD, MOCNESS, optical
		counter, WP3

4.6 Indicate nature and quantity of substances to be released into the marine environment:

NONE

4.7 Indicate whether drilling will be carried out. If yes, please specify:
NA

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:

NA

## 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):

NA

#### 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:

Sometime within the period 10.07 - 29.07. Timing and location of where the vessel will be is highly weather dependent and therefore impossible to predict.

6.2 Indicate if multiple entries are expected:

Unknown. The survey depends on the weather. Ideally, the vessel would survey all of the nation's waters without re-entry.

# 7. Port Calls

7.1 Dates and Names of intended ports of call:

None intended

7.2 Any special logistical requirements at ports of call:

NONE

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

NA

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:

NA

8.2 Proposed dates and ports for embarkation/disembarkation:

NA

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:

Report within 6 months, if required

 $9.2 \ Anticipated \ dates \ of submission to the coastal State of the final report:$ 

Report within 6 months.

9.3 Proposed means for access by coastal State to data (including format) and samples:

NA

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

NA

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

NA

9.6 Proposed means of making results internationally available:

All data stored and reported to ICES within 3 months.

10. Other permits Submitted

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

NA

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:

Figure of survey area.

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Signature:

Contact information of the focal point:

Name: Jennifer Devine Country: Norway

Affiliation: Institute of Marine Research

Address: P.O.Box 1870 Nordnes, N-5024 Bergen Norway

Telephone: +47 90259201 Fax: +47 55238500

Email: jennifer.devine@imr.no

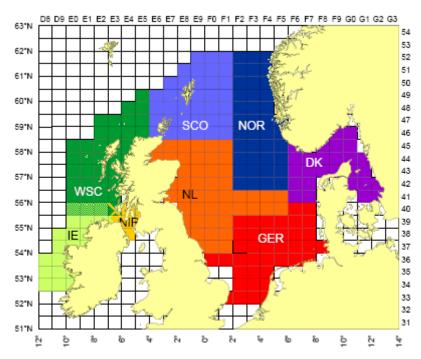


Figure 1. ""Johan Hjort" will cover area marked dark blue, as "NOR" for the acoustical survey of herring and saithe.

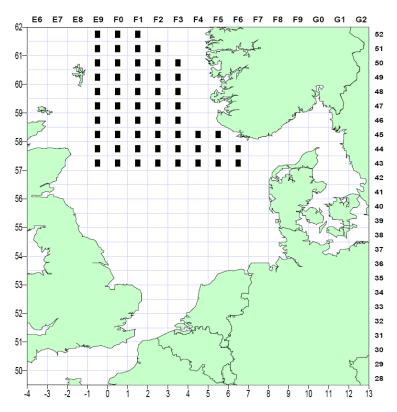


Figure 2. "Johan Hjort" will work rectangles marked during the bottom trawl survey (old survey grid) and the saithe acoustic survey.

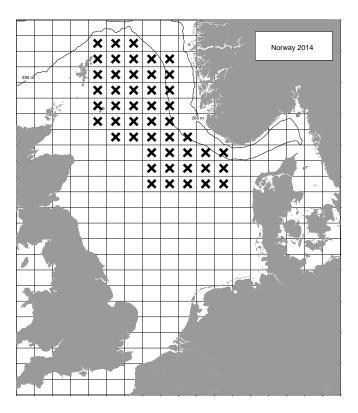


Figure 3. The new proposed survey area for Norway, proposed by the IBTSWG and awaiting approval by the North Sea assessment working group (WGNSSK). This will then be the area for the saithe acoustic survey and the IBTS bottom trawl survey.