 <b>Havforskningsinstituttet</b>					Ref.id.: KS&SMS.5.4-02
<b>ICES-Søknadskjema</b>					<b>Standard</b>
Versjon: 1.02	Opprettet: 04.10.2012	Skrevet av: TOD	Godkjent av: PWN	Gjelder fra: 04.10.2012	Sidenr: 1 av 5

## ICES søknadsskjema

### NOTIFICATION OF PROPOSED RESEARCH CRUISE

#### PART A: GENERAL

1. NAME OF RESEARCH SHIP "HÅKON MOSBY" CRUISE NO. 2015612
2. DATES OF CRUISE From: 18 June 2015 To: 1 July 2015
3. OPERATING AUTHORITY: Institute of Marine Research  
P.O.Box 1870 Nordnes  
N-5817 BERGEN NORWAY  
TELEPHONE: 47-55238500  
TELEFAX : 47-55238531  
TELEX: 42297 OCEAN N  
E-MAIL: post@imr.no
4. OWNER  
(if different from no. 3)
5. PARTICULARS OF SHIP: Name: "HÅKON MOSBY"  
  
Nationality: Norwegian  
Overall length: 48 metres  
Maximum draught: 4.5 metres  
Net tonnage: 209  
Propulsion: Diesel  
Call sign: LJIT  
Registration port and number  
(if registered fishing vessel)
6. CREW Name of master: Johnny Karlsen/Tom Ole Drange  
  
Number of crew: 9
7. SCIENTIFIC PERSONNEL Name and address of scientist in charge:  
Henrik Søiland  
Institute of Marine Research  
P.O.Box 1870 Nordnes  
N-5817 BERGEN NORWAY  
Tel/telex/fax no.: +47 92695447  
  
No. of scientists: 6
8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)  
  
Norwegian Sea and Iceland Sea (60-71° N, 26 W-20E). (See also the chart at the end of the document)
9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE  
  
The cruise is part of a research project where the aim is to investigate the water masses and ocean currents in the Iceland and Norwegian Sea. On this cruise we will recover 6 subsurface sound source moorings, 3 of these in the Iceland EEZ. We will also deploy 2 current meter moorings in the Iceland EEZ. In addition we will do hydrographic measurements, ocean current measurements with ship mounted ADCP along and close to the courses indicated at the map included at the end of the document.



10. DATES AND NAMES OF INTENDED PORTS OF CALL

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART B: DETAIL

1. NAME OF RESEARCH SHIP "Håkon Mosby" CRUISE NO. . 2015612

2. DATES OF CRUISE From: 18 June 2015 To: 1 July 2015

3. a) PURPOSE OF RESEARCH

The cruise is part of a research project where the aim is to investigate the water masses and circulation in the Iceland and Norwegian Sea. In the project Norwegian and Icelandic scientists collaborate. The studies include hydrographic measurements, deployment of both surface and subsurface drifters and moorings.

b) GENERAL OPERATIONAL METHODS (including full description of any fish gear, trawl type, mesh size, etc.)

CTD probe with multi water-sampler  
Ship mounted ADCP current measurements  
Recovery of subsurface sound source moorings  
Deployment of subsurface current meter moorings

4. ATTACH CHART showing (on an appropriate scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished

A chart showing the planned cruise track is included at the end of the document.

5. a) TYPES OF SAMPLES REQUIRED (e.g., geological/water/plankton/fish/radionuclide).

Seawater sampling for salinity (CTD) calibration

b) METHODS OF OBTAINING SAMPLES (e.g., dredging/coring/drilling/fishing, etc. When using fishing gear, indicate fish stocks being worked, quantity of each species required, and quantity of fish to be retained on board).

CTD multi water sampler

6. DETAILS OF MOORED EQUIPMENT

Two sub surface current meter moorings will be deployed in the Iceland EEZ. These moorings will be recovered/serviced in summer of 2016. The moorings are equipped with an acoustic release that will be activated at recovery.

3 sound source mooring deployed in 2013 within the Iceland EEZ will be recovered on this cruise. The moorings are subsurface and the top of the moorings are located about 600 meters below the sea surface. The moorings are equipped with an acoustic release that will be activated at recovery. The mooring positions are shown below. The acoustic signals from each sound source is an 80 second long CW (continuous wave) pulse at 260 Hz transmitted twice a day. The signal strength is estimated to be 179 dB re 1 microPascal at 1 m distance.



<u>Laying</u>	<u>Dates</u>	<u>Recovery</u>	<u>Description</u>	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
18-30 June 2015	18-30 June 2015	July 2016	Measure ocean currents	700 m	67.2 N	14 W
18-30 June 2015	18-30 June 2015	July 2016	Measure ocean currents	1150 m	67.5 N	14W

The following sound source moorings will be recovered on the cruise:

July 2013	June 2015	See above	1200m	68.5°N	18°W
July 2013	June 2015	See above	1500m	68°N	8.25°W
July 2013	June 2015	See above	2000m	69°N	14°W

The positions are approximately.

7. ANY HAZARDOUS MATERIALS (chemicals/explosives/gases/radioactives, etc.  
(Use separate sheet if necessary)

- a) Type and trade name
- b) Chemical content (and formula)
- c) IMO IMDG code (reference and UN no.)
- d) Quantity and method of storage 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 kg.

8. DETAIL AND REFERENCE OF

a) Any relevant previous/future cruises

A research cruise was performed in 2012 when current meter moorings were deployed. In 2013 the sound source moorings, subsurface floats and surface drifter were deployed and the current meter moorings deployed in 2012 were serviced. In 2014 the current meter moorings were recovered.

b) Any previously published research data relating to the proposed cruise

9. NAME AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) IN WHOSE WATERS THE PROPOSED CRUISE TAKES PLACE WITH WHOM PREVIOUS CONTACT HAS BEEN MADE

Hedinn Valdimarsson, Skulagata 4, 121 Reykjavik, Iceland, tel: 354-5752000, 354-5752063 (direct)  
Steingrímur Jonsson, University of Akureyri, Borgir v/Norðurslóð, 600 Akureyri, Iceland

10. STATE

a) Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable (Yes/No)

YES

b) Participation of an observer from the coastal state for any part of the cruise together with the dates and the ports for embarkation and disembarkation

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c) When research data from the intended cruise is likely to be made available to the coastal state and by what means

The data will go into international databases ICES and will therefore be available to all scientists.



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PART C. SCIENTIFIC EQUIPMENT

Complete the following table

Coastal state: Iceland

Port call:

Dates:

Indicate "YES or "NO"

List scientific work by function  e.g. Magnetometry Gravity Diving Seismics Seabed sampling Bathymetry Trawling Echo sounding Water sampling U/W TV Moored instr. Towed instr.	Distance from coast					
	Water column including sediment sampling of the seabed	Fisheries research within fishing limits	Research concerning the natural resources of the continental shelf or its physical characteristics	Within 4 nm	Between 4-12 nm	Between 12 and 200 nm
CTD	Yes	No	No	No	No	Yes
Rosette	Yes	No	No	No	No	Yes
Underway systems	Yes	No	No	No	No	Yes
Ecco sounding	Yes	No	No	No	No	Yes
Water sampling	Yes	No	No	No	No	Yes
Towed Instrument	No	No	No	No	No	No
Trawling	No	No	No	No	No	No
Moored Instruments	Yes	No	No	No	No	Yes
Surface drifters	No	No	No	No	No	No

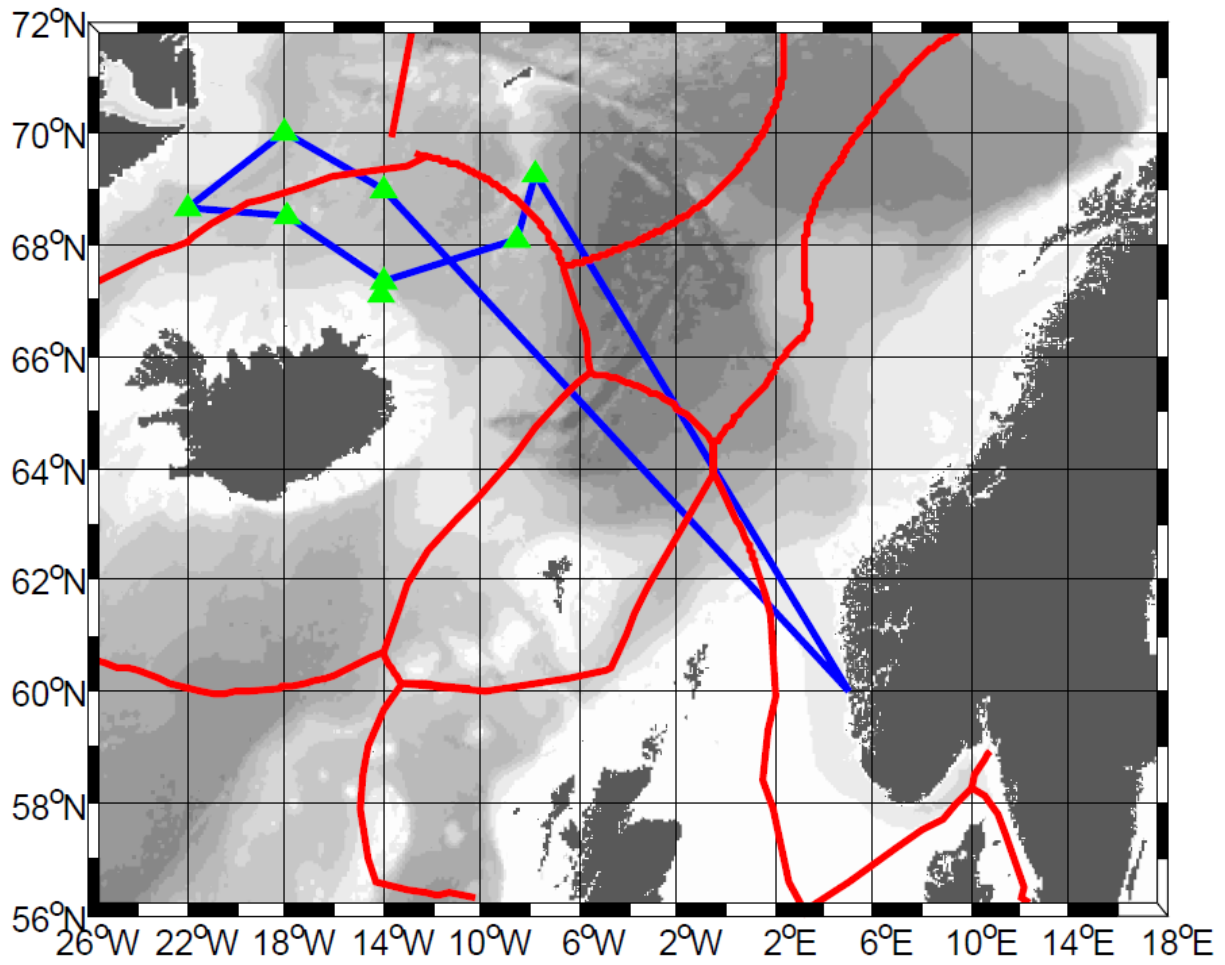
.....  
Henrik Søiland (Principal Scientist)

Date: 27 March 2015

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.



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Schematic view of the planned cruise track (blue line) and mooring recovery and deployments (green triangles).