		Havfors	kningsinstitu	ittet	Ref.id.: KS&SMS.5.4-02
ICES-S	Øknadskjema				Standard
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ICES søknadsskjema

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART A: GENERAL

1. NAME OF RESEARCH SHIP "HÅKON MOSBY"

CRUISE NO. 2016618

2. DATES OF CRUISE

From: 21 August 2016

To: 11 September 2016

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. <u>OWNER</u>

(if different from no. 3)

5. PARTICULARS OF SHIP: Name: "HÅKON MOSBY"

Nationality: Norwegian

Overall length: 48

metres metres

Maximum draught: 4.5

Net tonnage: 209 Propulsion:

Diesel

Call sign: LJIT

Registration port and number (if registered fishing vessel)

6. CREW

Name of master: Kjell Ove Sandøy/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, Greenland Sea and Iceland Sea (60-78° N, 26 W-16E). (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 the ocean currents in the Greenland, Iceland and Norwegian Seas and the exchange between these seas. On this cruise we will recover 2 subsurface sound source moorings and deploy one current meter mooring in the Greenland EEZ and recover and redeploy 2 current meter moorings in Iceland EEZ. In addition we will do hydrographic measurements, ocean current measurements with ship mounted ADCP and lowered 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



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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. . 2016618

2. DATES OF CRUISE

ICES-Søknadskjema

From: 21 August 2016

To: 11 September 2016

3. a) PURPOSE OF RESEARCH

The cruise is part of a research project where the aim is to investigate the water masses and ocean currents in the Greenland, Iceland and Norwegian Seas. In the project Norwegian and Icelandic scientists collaborate. The studies include hydrographic measurements and ocean current measurements with ship mounted ADCP, lowered ADCP and moored current meters.

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

CTD probe with multi water-sampler

LADCP mounted on CTD

Ship mounted ADCP current measurements

Recovery and deployment of subsurface current meter moorings

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 and chemical analysis.

b) <u>METHODS OF OBTAINING SAMPLES</u> (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 were deployed in the Iceland EEZ in 2015. These moorings will be recovered/serviced and redeployed on this cruise. The moorings are equipped with an acoustic release that will be activated at recovery.

Laying	Recovery	Description	Depth		Latitude	Longitude
18-30 June 2015	Summer 2017	Measure ocean	currents	700 m	67.2 N	14 W
18-30 June 2015	Summer 2017	Measure ocean	currents	1150 m	67.5 N	14W

The positions are approximate.

7. ANY HAZARDOUS MATERIALS (chemicals/explosives/gases/radioactives, etc.



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(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

Cruises have been performed in 2012-2015 and it is the plan to continue cruise activity in 2017. On the research cruise in 2012 current meter moorings were deployed. In 2013 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. In 2015 the current meter moorings were redeployed and it is the plan to service it on this cruise and finally recover the moorings in 2017.

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) Steingrimur 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
- 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: No

Dates:

Indicate "YES or "NO"

		Distance from coast				
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.	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
Echo 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: 21 April 2016

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.



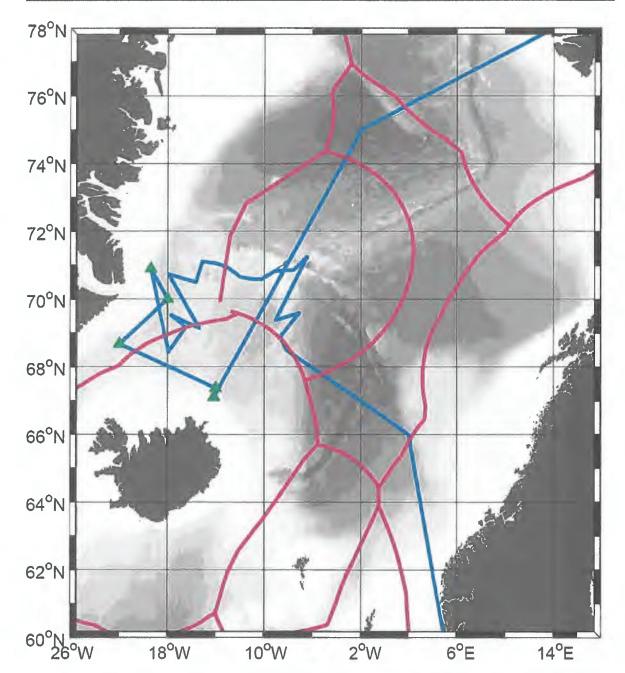
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Schematic view of the planned cruise track (blue line) and mooring recovery and deployments (green triangles).