 <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. 2013616
  
2. DATES OF CRUISE      From: 18 July 2013 To: 31 July 2013
  
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:                      metres  
Maximum draught:                  metres  
Net tonnage:  
Propulsion:                      Diesel  
Call sign:  
Registration port and number  
(if registered fishing vessel)
  
6. CREW                              Name of master:  
  
Number of crew:
  
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 55238453  
  
No. of scientists:
  
8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)  
  
Norwegian Sea and Iceland Sea (66-71° N, 22 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 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.
  
10. DATES AND NAMES OF INTENDED PORTS OF CALL  
18 July 2013: Tromsø, Norway



31 July 2013, Tromsø, Norway  
~22 July 2013, Raufarhöfn, Iceland

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. 2013616
- 2. DATES OF CRUISE From: 18 July 2013 To: 31 July 2013
- 3. a) PURPOSE OF RESEARCH

The cruise is part of a research project where the aim is to investigate the water masses 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
- ADCP current measurements
- Recover and deployment of subsurface moorings
- Deployment of surface drifters
- Deployment of subsurface RAFOS drifters.

- 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 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).

Water samples

- 6. DETAILS OF MOORED EQUIPMENT

Two moorings will be recovered and deployed for another year.

The other moorings will be deployed at this cruise and remain in the water for approximately two years. The moorings are subsurface and the top of the moorings are located 600 meter below the sea surface. The moorings are equipped with an acoustic release that will be activated at recovery. At the map the mooring positions are shown. The acoustic signals from each sound source will be 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.

Dates

<u>Laying</u>	<u>Recovery</u>	<u>Description</u>	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
18-31 July 2013	June 2014	Measure current	400 m	67 N	13.5 W



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18-31 July 2013	June 2014	Measure current	800 m	67 N	13.5 W
18-31 July 2013	July 2015	See above	1200m	68.5°N	18°W
18-31 July 2013	July 2015	See above	1500m	68°N	8.25°W
18-31 July 2013	July 2015	See above	1500m	67°N	10°W
18-31 July 2013	July 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 similar research cruise was performed in 2012 when the moorings were deployed. A similar cruise is also planned the next two years, summer of 2014 and 2015 for recovering of the moorings.

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 using a separate page for each coastal state

Coastal state: Iceland
Port call: Raufarhöfn, Iceland
Dates: ~20-24 July 2013

Indicate "YES or "NO"

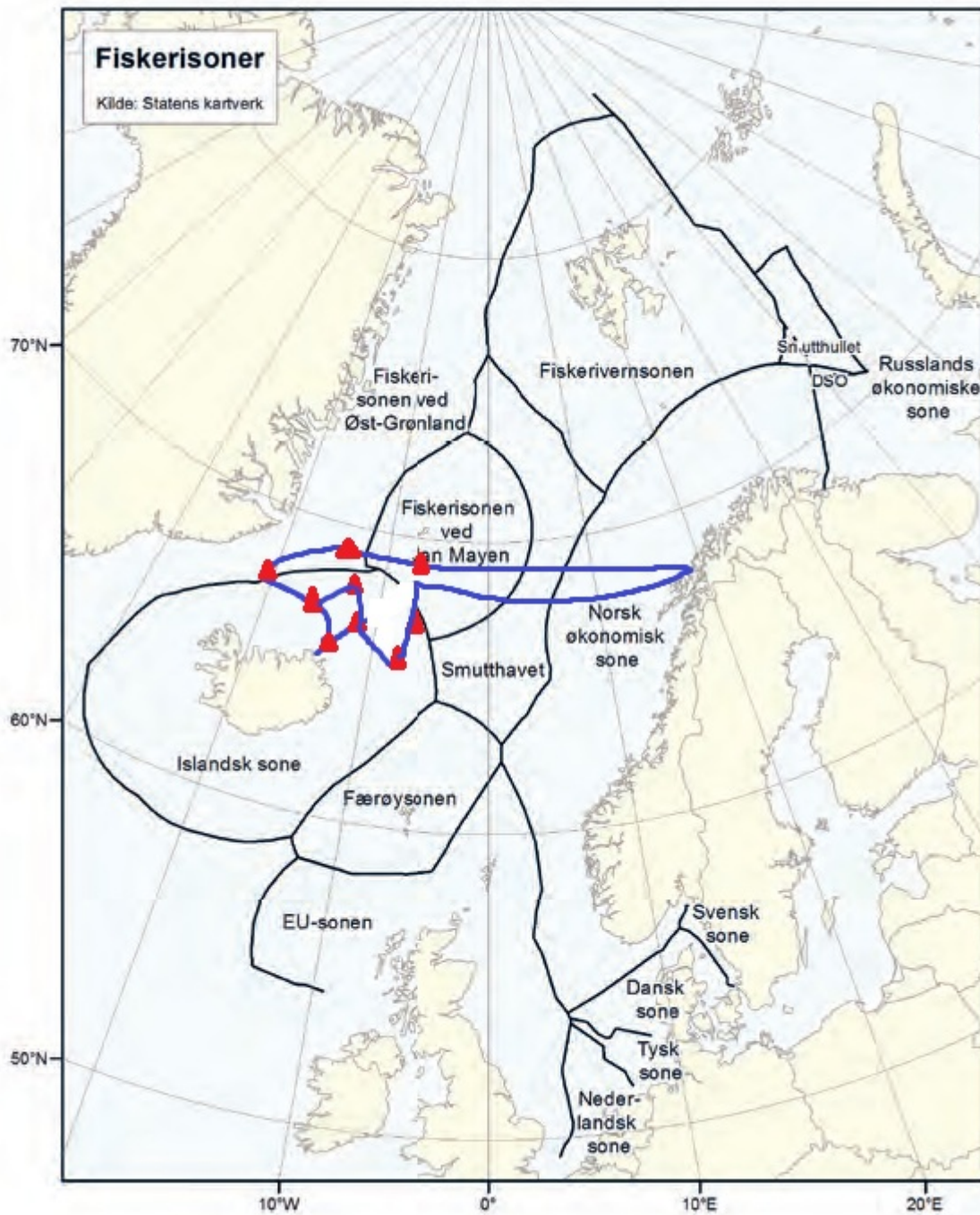
Table with 7 columns: List scientific work by function, Water column including sediment sampling of the seabed, Fisheries research within fishing limits, Research concerning the natural resources of the continental shelf or its physical characteristics, Distance from coast (Within 4 nm, Between 4-12 nm, Between 12 and 200 nm). Rows include CTD, Rosette, Underway systems, Ecco sounding, Water sampling, Towed Instrument, Trawling, Moored Instruments, and Surface drifters.

Handwritten signature of the Principal Scientist

(On behalf of the Principal Scientist)

Date: 8 March 2013

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.



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