APPLICATION FOR CONSENT TO CONDUCT MARINE SCIENTIFIC RESEARCH
IN AREAS UNDER NATIONAL JURISDICTION OF
THE REPUBLIC OF ICELAND

Date : December 8th 2011

1 - GENERAL INFORMATION

1.1. Cruise name and/or number : BATHYNORD 2012 on research vessel *Pourquoi pas?*

1.2. Sponsoring institution :

Name : Ifremer
Address : 155, rue Jean-Jacques Rousseau
92138 Issy les Moulineaux - France
Phone : 33 (0)1.46.48.21.00 Fax : 33 (0)1.46.48.22.48
Director : Jean-Yves Perrot

1.3. Scientist in charge of the project :

Name : François LE CORRE
Address : BCRM de Brest
Groupe Océanographique de l'Atlantique CC 61
29240 Brest Cedex 9 _ France
Phone : (+33) 2 98 14 05 44 Fax : (+33) 2 98 14 05 46
Email : goa-d@shom.fr

1.4. Scientist from the Republic of Iceland involved in the planning of the project : None

Name :
Address :

Phone : Fax :
Email :

1.5. Submitting officer:

Name : Jean-Xavier Castrec
Address : Centre Ifremer de Brest - Secteur Programmation de la Flotte
B.P. 70 - 29280 Plouzané
Phone : 33 (0)2.98.22.44.53 Fax : 33(0)2.98.22.44.55
Email : Jean.Xavier.Castrec@ifremer.fr

2 - DESCRIPTION OF THE PROJECT

2.1. Nature and objectives of the project :

The purpose of the survey cruise BATHYNORD 2012 is to improve the geophysical knowledge in the North Atlantic Ocean. The R/V *Pourquoi pas ?* will call at Reykjavik during this cruise.

This application is made for:

- the transits of the R/V *Pourquoi pas ?* to and from the port of Reykjavik. The vessel will take advantage of these transits to survey the area of the Reykjanes Ridge ;
- measurements on a gravity base station in Reykjavik.

2.2. Relevant previous or future research cruises :

Similar scientific cruises may be carried out in the years to come.

2.3. Previously published research date relating to the project :

None

3 - METHODS AND MEANS TO BE USED

3.1. Particular of vessel

Name : ***Pourquoi pas ?***
Nationality: French
Owner : Ifremer
Opérator : Genavir
Overall length : 107.6 m
Gross tonnage : 7854 UMS
Propulsion : Propulsion : Diesel electric, together with DPII dynamic positionning allowing position holding and lane following.
Cruise speed : 11 Nds
Call sign : FMCY
Method and capability of communication (including telex, frequencies) :

GSM : *Tel : 33 (0)6.85.76.63.78 (bridge) - 33 (0)6.82.84.11.60 (captain)*
Fax : 33 (0)6.19.49.78.34
Inmarsat : *Tel : 00.870.7.643.367.38 (bridge) 00.870.7.643.367.48 (stand. auto.)*
Fax : 00.870.7.643.367.50
Vsat : *Tel : 33 (0)2.98.22.41.15 (bridge) - Fax : 33 (0)2.98.22.41.80*
- Telex Inmarsat C : *058x-4-228-207-61 ou 058x-228-207-62*
(Codes: Atlantic East : 0581 - Atlantic West : 0584 - Pacific : 0582 - Indian Ocean: 0581)
- Email : *PP.Commandant@pourquoipas.ifremer.fr*
- Email Telex 1 : *PourquoipasC1@skyfile-c.com*
- Email Telex 2 : *PourquoipasC2@skyfile-c.com*
- *Email : PP.Commandant@pourquoipas.ifremer.fr*

Name of master : Thierry ALIX
Number of crew : 18 to 33
Number of scientists on board : 40

3.2. Aircraft or other craft to be used in the project :

None

3.3. Particulars of methods and scientific instruments :

Types of samples and data	Methods to be used	Instruments to be used
Bathymetry	Along shiptrack	Multibeam echosounders Seabat 7150, Seabat 7111 Singlebeam echosounders EA400, EA600
Geophysical measurements	Along shiptrack	Sea gravimeter (Bodenseewerk KSS31) Towed magnetometer SMM2
Geophysical measurements	In port	Portable land gravimeter Scintrex

Sedimentology	Along shiptrack	Sub-bottom profiler
Current measurements	Along shiptrack	ADCP (Acoustic Doppler Current Profiler) 38 and 150 kHz
Hydrology	Along shiptrack	Expandable bathythermographs (XBT, XCTD) Hull mounted celerimeter Thermosalinometer

3.4. Indicates whether harmful substances will be used :

None

3.5. Indicate whether drilling will be carried out :

None

3.6. Indicate whether explosives will be used :

None

4 - INSTALLATIONS AND EQUIPMENTS

Details of installations and equipments (dates of laying, servicing, recovery, exact locations and depth)

Survey at sea

Echosounders will be used in order to measure the bathymetry during the transits with the accuracy meeting the requirements of the International Hydrographic Organization (IHO).

Sea gravimeter and towed magnetometer will be used to measure the changes in geophysical signals (anomalies) during the transits.

Sub-bottom profiler will be used to survey the seafloor.

ADCP will be in permanent acquisition to measure current in the water column.

Hydrology measurements are used for multibeam echosounders signal processing (inversion of time into vertical distance taking into account the acoustic ray paths).

Measurement during port calls

Measurements will be made in Reykjavik on a gravity base station of the IGSN71 (International Gravity Standardization Net 1971), in order to calibrate the sea gravimeter.

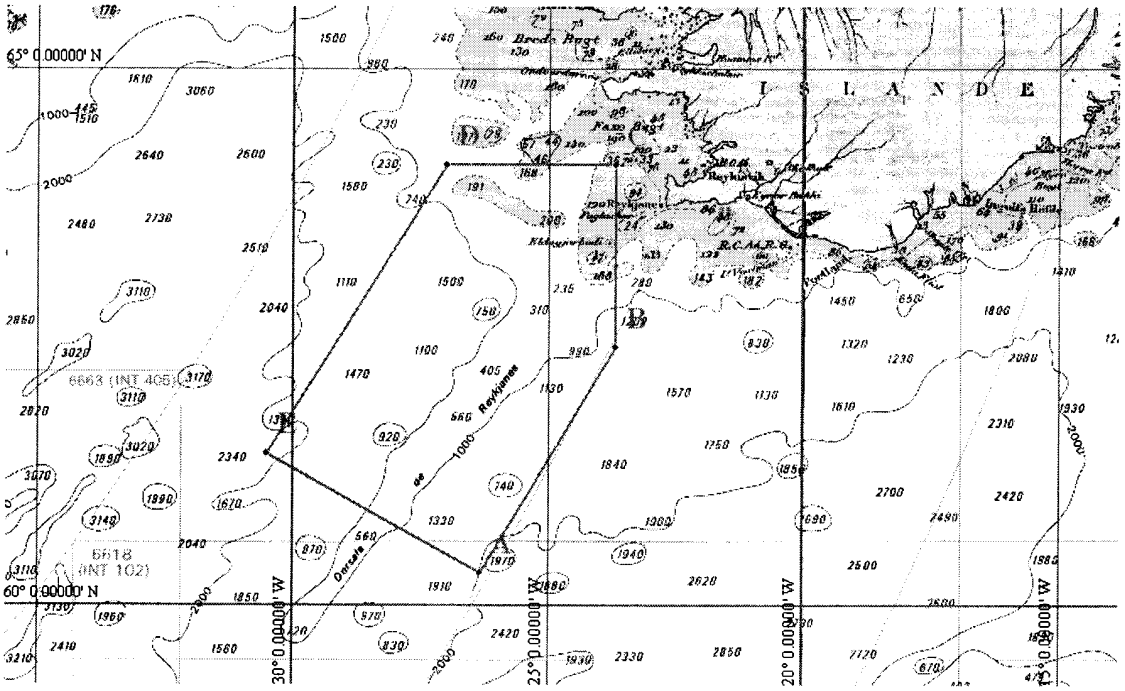
5 - GEOGRAPHICAL AERAS

5.1. Indicate geographical areas in which the project is to be conducted (with reference in latitude and longitude) :

The survey will be carried out in the area of the Reykjanes Ridge, in an area delimited by the following points :

A : 60°20'N - 26°20'W
B : 62°30'N - 23°40'W
C : 64°10'N - 23°40'W
D : 64°10'N - 27°00'W
E : 61°30'N - 30°30'W

5.2. Attach chart(s) at an appropriate scale showing the geographical areas of the intented work and, as far as practicable, the positions of intented stations, the tracks of survey lines, and the locations od installations and equipment :



6 - DATES

6.1 Expected dates of first entry into and final departure from the research area of the research vessel :
The first entry and the final departure from the research area will occur before and after the port calls in Reykjavik. The dates of the port calls are not yet set.
The first entry in the research area will occur after May 3rd 2012.
The final departure from the research area will occur before July 23rd 2012.

6.2 Indicate if multiple entry is expected :

Multiple entry is expected.

7 - PORTS CALLS

7.1. Dates and names of intended ports of call in the Republic of Iceland :

At least two port calls are intended in Reykjavik. The dates of the calls are not yet set.

7.2. Any special logistical requirements at ports of call :

None

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

None

8 - PARTICIPATION

8.1. Extent of which the Republic of Iceland will be enabled to participate or to be represented in the research project :

The operations carried out will be presented during the call if requested.

8.2. Proposed dates and ports for embarkation/disembarkation :

The operations will be carried out just before arrival or just after departure from Reykjavik and the other survey areas are far away from Reykjavik. It is therefore not proposed to board some observers because of the logistic constraints with the boarding and disembarkation of observers when entering or leaving the area under the jurisdiction of the Republic of Iceland.

9 - ACCESS TO DATA, SAMPLES AND RESEARCH RESULTS

9.1. Expected dates of submission to the Republic of Iceland of preliminary reports which should include the expected dates of submission of the final results :

On demand of the Icelandic authorities, a cruise report will be sent to the Republic of Iceland no later than 6 months after the end of the cruise.

9.2. Proposed means for access by the Republic of Iceland to data and samples :

On demand of the Icelandic authorities, hydro-oceanographic data will be sent to the Republic of Iceland on digital storage devices.

9.3. Proposed means of making research internationally available :

None

ANNEX

List of the scientific team

The scientific team will be composed of about ten surveyors of the French Hydrographic Office (SHOM).

The head of the scientific team will be Jean-Christophe Rosada.