AMBASSADE DE FRANCE
LONDRES

N° NV CD134 :

The French Embassy presents its compliments to the Foreign and Commonwealth Office, Protocol Division, and has the honour to forward to it an application for an authorization for the maritime scientific research vessel N/O "*Pourquoi pas?*" of IFREMER to operate in United Kingdom territorial waters (Cadix Gibraltar area – between 9°W/4°30'W and 34°N/37°30'N, Portugal Area - between 12°W/8°30W and 37°N/41°N) from 1st April 2014 to 30th May 2014.

The purpose of the "MEDITGIB" experiment is to improve the oceanographic knowledge of the North Atlantic Eastern margin and the occidental Mediterranean Sea, from the Morocco northern coast to the Spain northern coast.

No harmful substances and explosives will be used. No drilling will be carried out. 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).

The French Embassy avails itself of this opportunity to express to the Foreign and Commonwealth Office the assurance of its highest consideration./.

AMBASSADE DE FRANCE EN GRANDE BRETAGNE
RÉPUBLIQUE FRANÇAISE

London, 29 January 2014.

Foreign and Commonwealth Office
Law of the Sea Section, Legal Advisers
K1.197 - Main Building
Whitehall
London SW1A 2AH

Flotte océanographique française

Objet : **Demande de recherche marine "METIGIB 2014 N/O" *Pourquoi pas ?" dans les eaux du Royaume Uni**

**Ministère des Affaires Etrangères**
**Monsieur Jean Brillac**
**Sous-direction de la recherche et des échanges scientifiques**
27, rue de la Convention – CS 91533
75732 Paris Cedex 15

N/Réf : UMS 2013-159
**Monsieur Jean-Xavier Castrec**
**Ifremer Direction des Moyens et des Opérations Navals. UMS Flotte océanographique française.**

Brest, le 22 juillet 2013

Monsieur,

**OBJET : Demande de recherche marine "METIGIB 2014" du N/O *"Pourquoi pas ?"* dans les eaux du Royaume Uni.**

BP 70 - 29280 Plouzané

Tél. : 02 98 22 45 77
Fax. : 02 98 22 45 55

direction@flotteoceanographique.fr
www.flotteoceanographique.fr

Je vous prie de bien vouloir trouver ci-joint, une demande d'autorisation de recherches scientifiques marines dans les eaux de la juridiction du pays ci-dessus indiqué, pour transmission par voie diplomatique au Gouvernement de ce pays.

Je vous laisse juge, en liaison avec vos Services dans ce pays, de supprimer de cette demande les informations que vous estimeriez inopportun de transmettre.

Je reste à votre disposition pour toute information complémentaire que vous souhaiteriez ou que le Gouvernement concerné demanderait.

Jean-Xavier Castrec

**NB :** *Je vous serais reconnaissant de bien vouloir, à titre d'accusé de réception, me retourner la copie de la présente lettre datée et visée.*

APPLICATION FOR CONSENT TO CONDUCT MARINE SCIENTIFIC RESEARCH IN AREAS UNDER NATIONAL JURISDICTION OF THE UNITED KINGDOM

**Date : july 22 th 2013**

## 1 - GENERAL INFORMATION

**1.1. Cruise name and/or number :MEDITGIB 2014**

**1.2. Sponsoring institution :**

Name : Ifremer
Address : Siège social : Technopolis 40
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. Scientifique en charge du projet :**

**Nom :** Dr PICHON Annick
**Adresse :**
Division Hydrographie, Océanographie et Météorologie militaires/ Recherche
Service Hydrographique et Océanographique de la Marine (SHOM) – 13, rue du Chatellier – CS 92803 – 29228 Brest Cedex 2 – France
**Téléphone :** (+33) 2 98 22 15 68 **Fax :** (+33) 2 98 22 18 64
**Email :** pichon@shom.fr

**1.4. Scientist from Gibraltar involved in the planning of the project : None**

Name :
Address :
Phone : Fax :

**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

**Name :** Jean-Claude LE GAC
**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

## 2 - DESCRIPTION OF THE PROJECT

### 2.1. Nature and objectives of the project :

The purpose of the MEDITGIB 2014 experiment is to improve the oceanographic knowledge of the North Atlantic Eastern margin and of the occidental Mediterranean sea, from the Morocco northern coast to the Spain northern coast.

The main topics are:

- measurement of the temporal variability of the Mediterranean outflow and interactions with high frequencies,
- measurement of internal tidal waves on both sides of the Strait of Gibraltar,
- test of a real time data recovery system (on a mooring) to validate forecast systems.

Pourquoi pas? will stop in Cadiz and Lisbon during this experiment.

This application is made for:

- the transits of the R/V Pourquoi pas ? to and from the port of Cadiz et Lisbon.
- hydrographic and oceanographic measurements inside areas defined in 5.

### 2.2. Relevant previous or future research cruises :

MOUTON2005: measurements on French and Portuguese continental slopes.

MOUTON 2007: measurements on the Armorican coastal shelf and in the English channel (internal waves and solitons, tidal fronts, tidal residual circulation, drift due to wind) and study of upwelling (surfacing of deep cold water) and the internal tide on the Portuguese continental slope.

MITIC 2010: measurements on Portuguese continental slope off Lisbon to study tide and internal waves.

### 2.3. Previously published research date relating to the project :

Pichon, A.,Y.Morel,R.Baraille, L.S.Quaresma , 2011. Internal tides interactions in the Bay of Biscay: Observations and modelling. Journal of Marine Systems doi:10.1016/j-jmarsys.2011.07.003

Pichon, A., Correard, S., 2006. Internal tides modeling in the bay of Biscay. Comparisons with observations. Sci. Mar. 70S1, 68–88.

Quaresma, L. S., Annick Pichon , 2011:Modelling the barotropic tide along the West-Iberian margin Journal of Marine Systems doi:10.1016/jjmarsys.2011.09.016

## 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 :

| Type of data collected | Acquisition type | Systems |
|---|---|---|
| Bathymetry | Along shiptrack | Multibeam echosounders Seabat 7150, Seabat 7111<br>Singlebeam echosounders EA400, EA600 |

| | | |
|---|---|---|
| Currents | in situ measurements | Vessel ADCP (Acoustic Doppler Current Profiler) 38 and 150 kHz, moored ADCP on the bottom depth, lowered ADCP on the CTD current meters and ADCP on moorings. Drifting buoys. |
| conductivity, température | in situ measurements | CTD. CTD on a towfish « sea soar », Expandable bathythermographs (XBT, XCTD). Thermosalinometer, drifting thermistor chains |
| Meteorological measurements | Along shiptrack | Anemometers, wet and dry temperature, sea state. |
| Chemical measurements | Sampling | On board analysis of samples |
| Geophysical measurements | Along shiptrack | Sea gravimeter (Bodenseewerk KSS31)<br>Towed magnetometer SMM2 |

**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)**
Starting date of work :April 1, 2014
End of work : before 30 May 2014.

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).

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

Mooring deployments with currentmeters and CTD sensors are provided.

Mooring with an ADCP current meter on the bottom floor is provided.

## 5 - GEOGRAPHICAL AREAS

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

Two main areas will be covered during the survey

Cadix Gibraltar area : 9°W-4°30'W, 34°N-37°30'N

Portugal area: 12°W-8°30'W, 37°N-41°N

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

**(see the map in annex)**

## 6 - DATES

**6. Expected dates of first entry into and final departure from the research area of the research vessel :**

The first entry in the research area will occur after April 1th 2014.
The final departure from the research area will occur before May 30th 2014.

**6.2 Indicate if multiple entry is expected :**

Multiple entry is expected.

## 7 – PORTS D'ESCALE

**7.1. Dates and names of intended ports of call in Gibraltar:**

None

**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 Gibraltar will be enabled to participate or to be represented in the research project :**

The boarding of a representative of the Gibraltar authorities is possible.

**8.2. Proposed dates and ports for embarkation/disembarkation :**

Not known yet, depending on the port calls schedule.

## 9 - ACCESS TO DATA, SAMPLES AND RESEARCH RESULTS

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

Cruise reports are available three months after the end of the survey. These reports will be sent as soon as possible to the Gibraltar authorities by the SHOM department responsible of the survey execution.

### 9.2. Proposed means for access by Gibraltar to data and samples :

Data and sampling collected in the Gibraltar ZEE will be available at the latest, one year after the end of the cruise, with the corresponding particular reports, on request of the Gibraltar authorities.

### 9.3. Proposed means of making research internationally available :

Articles in international journals and international conferences.

**ANNEXE**

**List of the scientific team**

The scientific team will be composed of about 30 surveyors, military and civil, engineers and technicians, whose names will be sent later. Besides personal of the French Hydrographic Office (SHOM), there should also be some people from French and European scientific laboratories within a scientific cooperation with national laboratories and foreign laboratories.

## Areas of study