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

Date : March 30, 2006

1 – GENERAL INFORMATION

1.1 Cruise name and/or number : EVHOE 2006

1.2 Sponsoring institution :

Name :	**IFREMER** Institut Français de Recherche pour l'Exploitation de la Mer
Address :	155, rue Jean-Jacques Rousseau 92138 ISSY LES MOULINEAUX FRANCE
Phone	+33 1 46 48 21 00
Fax	+331 46 48 21 21
Name of Director :	Jean-Yves PERROT

1.3 Scientist in charge of the project :

Name :	Jean-Claude MAHE
Address :	IFREMER- 8, rue François TOULLEC 56100 LORIENT FRANCE
Telephone :	+33 2 97 87 38 18
Telefax :	+33 2 97 83 38 01
Email :	Jean.Claude.Mahe@ifremer.fr

1.4 Scientist (s) from UNITED KINGDOM involved in the planning of the project.

Name (s) : Dr. John NICHOLS

Address :	Ministry of Agriculture Fisheries and Food Fisheries Laboratory Lowestoft Suffolk NR33 OHT UNITED KINGDOM
Phone:	+44 1502 562244
Fax:	+44 1502 513865

1.5 Submitting officer :

Name and address :
Country :
Telephone :
Telex : Telefax :

2 – DESCRIPTION OF THE PROJECT

(Attach additional pages as necessary)

2.1 Nature and objectives of the project :

The French Bottom Trawl Surveys in Bay of Biscay and Celtic Sea (survey code : EVHOE)

a) Purpose of survey

The main objectives of the survey are :
- obtain abundance indices per age group and annual recruitment estimates for the sampled species ;
- build a reliable time series of those indices ;
- follow the evolution of the demographic structures of the main exploited fish populations ;
- map the spacio-temporal distribution of the fisheries resources per age group.

b) Area surveyed (fig. 1)

This French survey began in 1987. The area was limited to 48°30' N in the north and to the northern margin of Gouf de Cap Breton in the south (ICES divisions VIIh, VIIIa,b,c and d). In 1990, the survey area was extended towards the north (51°15' N) to cover the grounds of the Celtic Sea deeper than 100 meters (ICES divisions VIIe,f,g,h and j).

c) Methodology

The GOV 36/47 bottom trawl is used with a 20 mm mesh codend liner. The trawl is deployed with plane oval trawl boards of 1300 kg and with 10-20 cm rubber discs on the footrope.

The haul duration is 30 minutes and the towing speed 4 knots. Trawling is carried out during day time only.

In the Bay of Biscay (ICES divisions VIIIa,b,c and d) and in the Celtic Sea (ICES divisions VIIe,f,g,h and j), a stratified sampling scheme is used. The area is divided according to latitude into 5 blocks and the hauls were distributed in seven depth zones (15-30, 31-80, 81-120, 121-160, 161-200, 201-400, 401-600 m). 160 stations will be occupied at locations given in fig. 2.

Catch weight and catch numbers are recorded for all species, only selected finfish and shellfish are measured.

d) Extension of the study area in 1999 and 2000

Following the European contract DG XIV 98/057 " International Program of Standardised Bottom Trawl Surveys off Northwestern Europe", a comparative study of the different fish species catchabilities to the French/Irish and Irish/Scottish fishing boats/gears has been conducted in the Irish and U.K. waters (fig. 2). Following the SESITS program (1997-1998) involving the French, Spanish and Portuguese surveys, the whole study has led to the integration of the different data collected during surveys covering the area from Northern Scotland to the Strait of Gibraltar into an common international data base.

e) Improvment of knowledge on meso and bathy pelagic species

In 2001, 2002and 2003 , several hauls using a pelagic trawl have been carried out in the northern part of of Bay of Biscay, at immersions between –1500 m and – 50 m, in order to collect information on species which show a vertical migration during the night and can potentially be preys of marine mammals.

2.2 Relevant previous or future research cruises :

The survey was conducted in the fourth quarter (October-November) of each year from 1987 to 1990, in 1992 and 1994, 1995, 1997, 1998, 1999 and 2000 and also in the second quarter (May-June) of 1988 and 1991. The survey is intended to be carried in the future at least in 2007 and 2008 as the objective is the construction and the maintaining a long time series.

2.3 Previously published research data relating to the project :

A - Amara R., J.C. Poulard, F. Lagardère & Y. Désaunay, 1998. Comparison between the life cycles of two Soleidae, the common sole, Solea solea, and the thickback sole, Microchirus variegatus, in the Bay of Biscay (France). Environmental Biology of Fishes 53: 193-209.

A - Bez N., J. Rivoirard & J.C. Poulard, 1995. Approche transitive et densité de poissons. Cah. géostatistiques. Ecole des Mines, Paris 5: 161-177.

A - Blanchard F. & J. Boucher, 2001. Temporal variability of total biomass in harvested communities of demersal fishes. Fish. Res. 49: 283-293.

A - Blanchard F. & J. Boucher, en révision. Density-dependent interactions between three Gadiforme species in the Bay of Biscay (France). Environmental Biology of Fishes.

A - Blanchard F., 2001. Fishing effects on the diversity dynamics of demersal fish communities. Comparative analysis of the role of the interactions between specices in the Bay of Biscay and in the Gulf of Lion (France). CYBIUM 25 (3) : 293-294

A - Blanchard F., 2001. The effect of fishing on demersal fish community dynamics : an hypothesis. ICES J. Mar. Sci. 58(3): 711-718.

A - Blanchard F., en révision. Analyse comparée de la diversité spécifique des peuplements de poissons démersaux exploités du golfe de Gascgne et du golfe du Lion (France). Aquat. Living Resour.

A - Blanchard, F, 2001. Dynamics of harvested demersal fish communities: analysis of the species diversity in the Bay of Biscay (Atlantic Ocean) and in the Gulf of Lions (Mediterranean Sea). Aquat. Living Resour./Ressour. Vivantes Aquat. Vol. 14, no. 1, pp. 29-40.

A - Blanchard, F; Vandermeirsch, F, 2005. Warming and exponential abundance increase of the subtropical fish Capros aper in the Bay of Biscay (1973-2002). Comptes rendus Biologies [C. R. Biol.]. Vol. 328, no. 5, pp. 505-509.

A - Burgeot T., G. Bocquené, P. Truquet, L. Le Déan, J.C. Poulard, D. Dorel, A. Souplet & F. Galgani, 1993b. The dragonet (Callionymus lyra) a target species used for evaluation of the biological effects of chemical contazminants on French coasts. Mar. Ecol. Prog. Ser. 97: 309-316.

A - Charrier G., Chenel T., Durand J.-D., Girard M., Quiniou L., Laroche J. 2005. Discrepancies in phylogeographical patterns of two European anglerfishes (Lophius budegassa and Lophius piscatorius). Molecular Phylogenetics and Evolution. (Sous presse).

A - Charrier G., Coombs S., Laroche J. Genetic structure of whiting (Merlangius merlangus) in the North East Atlantic and adjacent waters. (Soumis à Marine Ecology Progress Series).

A - Charrier G., Durand J.-D., Quiniou L., Laroche J. Limited genetic structure of pollack (Pollachius pollachius L.) along an European coastal continuum. (Soumis à ICES Journal of Marine Science).

P2 - Poulard, J.-C., Blanchard, F., Boucher, J., Souissi, S., 2001. Variability in the demersal fish assemblages of Bay of Biscay during the 1990s. ICES Symposium. Hydrobiological Variability in the ICES Area, 1990-1999. Edinburgh, Scotland 8-10 August 2001 POSTER

P2 - Rochet, M.-J., Trenkel, V., Bertrand, J., Bellail, R., Coppin, F., Le Pape, O., Mahé, J., Morin, J., Poulard, J.-C., Schlaich, I., Souplet, a., Vérin, Y., 2004. Is the impact of fishing on the fish communities around France increasing? Poster présenté au symposium "Quantitative ecosystem indicators for fisheries management" (SCOR-Unesco, Paris, 31 mars - 3 avril 2004)

P2 - Spitz, J., Poulard, J.-C., Richard, E., Meynier, L., Pusineri, C., Ridoux, V., 2003. May changes in the diet of striped dolphins (Stenella coeruleoalba) from the Bay of Biscay reflect trends from groundfish surveys ? Seventeenth Annual Conference of the European Cetacean Society, Las Palmas de Gran Canaria, Spain. 9-13 March 2003.

3 – METHODS AND MEANS TO BE USED

3.1 Particulars of vessel

Name :	THALASSA		
Nationality :	French		
Owner :	IFREMER	Operator :	GENAVIR
Overall length :	73.65 meters		
Maximum draught :	6.15 meters		
Net tonnage :	840 UMS	Gross tonnage :	2803 UMS
Propulsion :	electrical		
Cruising speed :	11		
Call sign :	FNFP		

Method and capability of communication (including telex,frequencies) : Inmarsat B1
Phone: 3 227 297 20, Fax: 3 227 297 30
VHF

Name of master :	M. Piton
Number of crew :	25
Number of scientists on board :	25

3.2 Aircraft of other craft to be used in the project : NIL

3.3 Particulars of methods and scientific instruments

Types of samples and data	Methods to be used	Instruments to be used
biological observations on fish	trawling	bottom trawl GOV 36/47 Echo sounders
hydrographic observations	Temperature and salinity	CTD Seabird 19

3.4 Indicate whether harmful substances will be used : NIL

3.5 Indicate whether drilling will be carried out : NIL

3.6 Indicate whether explosives will be used : NIL

4 – INSTALLATIONS AND EQUIPMENTS

Details of installations and equipment (dates of laying, servicing, recovery, exact locations and depth) : NIL

5 – GEOGRAPHICAL AREAS

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

The survey will be conducted in Bay of Biscay and Celtic Sea from : 43°20' N to 52°30 N and 1°20' W to 12°00' W, the western limit of the studied area by bottom trawl will follow the 600 metres depth and 2000 metres depth for pelagic trawl.

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 figures 1 and 2

6 - DATES

6.1 Expected dates of first entry into and final departure from the research area of the research vessel:

From 8th November 2006 to 7th December 2006 in Celtic Sea.

6.2 Indicate if multiple entry is expected :

Yes

7 – PORT CALLS

7.1 Dates and names of intended ports of call in UK : NIL

7.2 Any special logistical requirements at ports of call

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

8 - PARTICIPATION

8.1 Extent to which UNITED KINGDOM will be enabled (name of coastal State) to participate or to be represented in the research project :

One or two scientists could participate to the survey.

8.2 Proposed dates and ports for embarkation/disembarkation :

Embarkation at Brest (France): 21 October 2006
Disembarkation at Lorient (France) : 4 November 2006. Fishing grounds of South and Centre of Bay of Biscay
or
Embarkation possible at Lorient (France) : 4 November 2006
Disembarkation at Brest (France) : 18 November 2006. Fishing grounds of North of Bay of Biscay and South of Celtic Sea.
or
Embarkation possible at Brest (France) : 18 November 2006
Disembarkation at Brest (France) : 7 December 2006. Fishing grounds of West and North-East of Celtic Sea.

9 – ACCES TO DATA, SAMPLES AND RESEARCH RESULTS

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

Cruise report within two months of the cruise ending

9.2 Proposed means for access by United Kingdom to data and samples :

Research data will be available on ASCII files two months after the cruise ending.

9.3 Proposed means of making research internationally available :

All information will be available through the ICES International Bottom Trawl Surveys Working Group.

ANNEX

List of the scientific team

Not available yet
Scientific manager leg 1: Jean.Pierre.Leaute@ifremer.fr
Scientific manager leg 2: Robert.Bellail@ifremer.fr
Scientific manager leg 3: Jean.Claude.Mahe@ifremer.fr

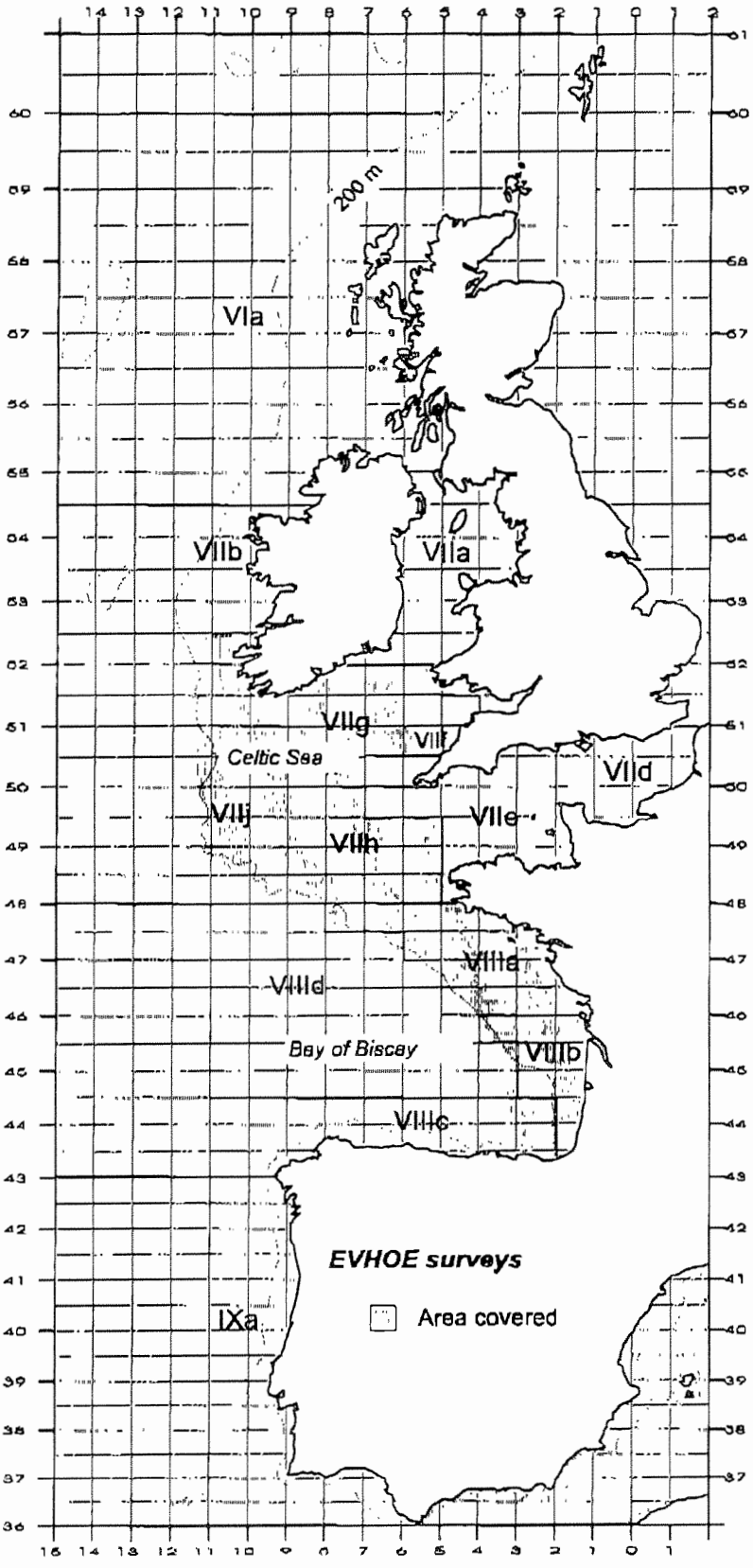

Fig. 1. - North-Eastern Atlantic ICES Statistical Areas and area covered during the EVHOE surveys.

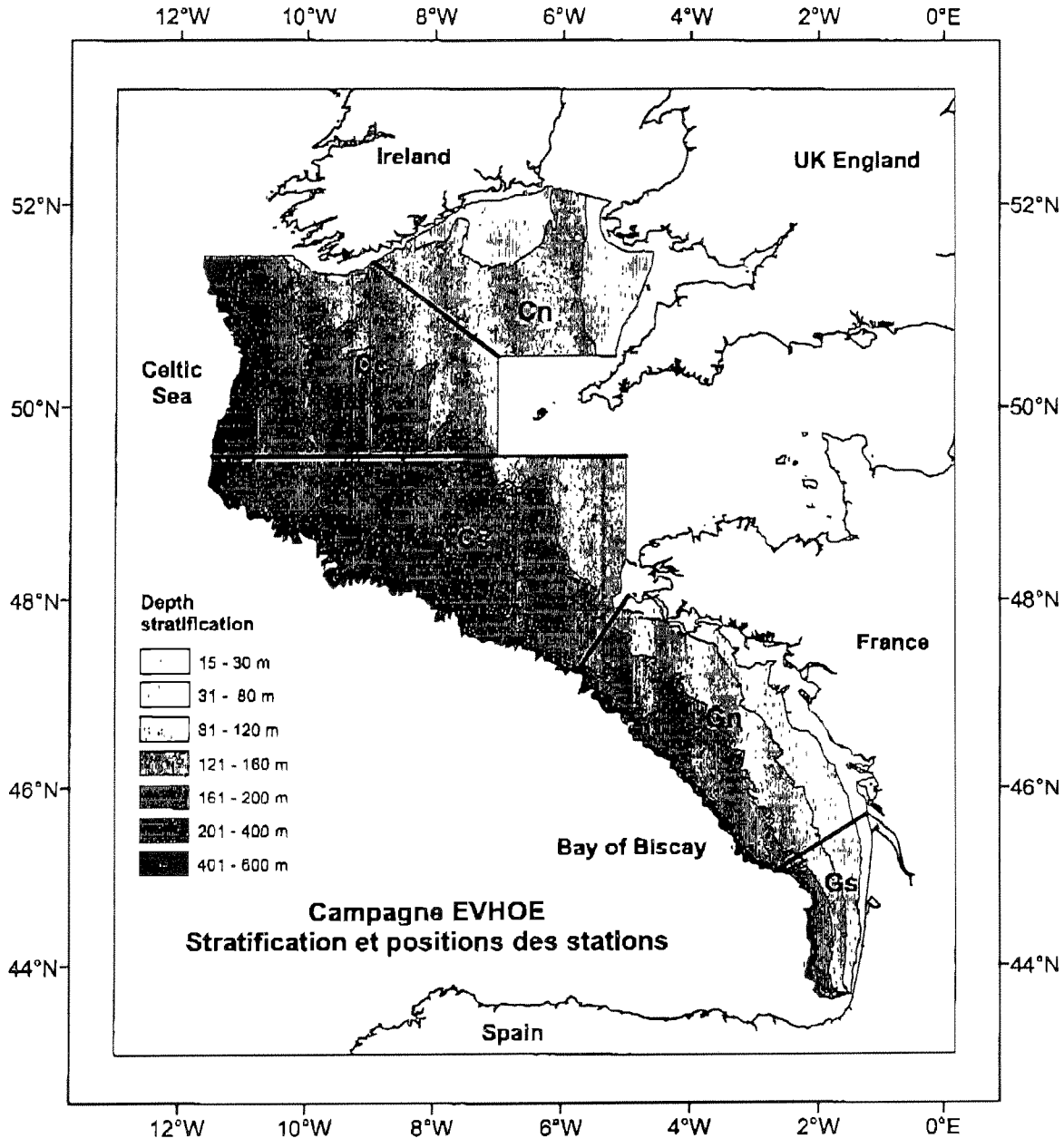

Fig.2 - EVHOE 2006 survey. Trawling and hydrographic stations locations.