# NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL
ORGANISATION
PART A

1. Name of research ship **BELGICA** Cruise N° **2007/02**

2. Dates of cruise From **05 February** to **09 February 2007**

3. Operating Authority **Belgian Navy under contract for Belgian Ministry of Science Policy**
**Management Unit of the North Sea Mathematical Model "M.U.M.M.",**
**3e & 23e Linieregimentsplein, 8400 Oostende**
**Tel, 32(0)59 70 01 31, Facsimile 32(0)59 70 49 35**
**Email :** bmmost@mumm.ac.be

4. Owner **Belgian state represented by Minister for Science Policy**

5. Particulars of ship

| | | |
|---|---|---|
| Name | **Belgica** | |
| Nationality | Belgian | |
| Overall length | 51 meters | |
| Maximum draught | 4,5 meters | |
| Nett tonnage | 232 NRT | |
| Propulsion | Diesel | |
| Call Sign | ORGQ | |
| Telephone | INMARSAT | 00870 76 218 73 27 |
| Facsimile | INMARSAT | 00870 32 052 18 12 |
| E-mail | belgica@mumm.ac.be | |

Crew

| | |
|---|---|
| Name of master | L. **GOUSSAERT, KVK** |
| N° of Crew | **15** |

7. Scientific Personnel Name and address of scientist in charge :

**Dhr. Hans POLET / Dhr. Fernand DELANGHE**
**ILVO-Dier-Visserij**
**Technical Research Unit**
**Ankerstraat 1, 8400 OOSTENDE, Belgium**
**Tel 059/56 98 37 / 059/56 98 41**
**Fax : 059/33 06 29**
**hans.polet@ilvo.vlaanderen.be / fernand.delanghe@ilvo.vlaanderen.be**

N° of scientists **15**

(A nominal roll of all personnel other than nationals of the applicant (flag) state is required)

8. Geographical area in which ship will operate (with reference in latitude and longitude).

**Belgian, Dutch, French and UK continental shelf**

**Between 0° and 5° E and 51°N and 54°30'N**

9. Brief description of purpose of cruise

- **Cruise in the frame of the research project IDEV: Development of a long-term strategy for the Belgian fishing fleet with the aim to develop an ecologically, economically and socially sustainable fishery. The purpose of the cruise is to test environment friendly and fuel saving adaptations to the beam trawl. Alternative gears like the outrigger otter trawl will by tried as well.**

10. Port of Call. Dates. Reasons.

**Zeebrugge 05.02 / 09.02 Departure/Arrival (start/end of campaign)**

11. Any special logistic requirements at ports of call (other than water, fuel provisions, etc.)

**N.A.**

# NOTIFICATION OF PROPOSED RESEARCH CRUISE

DETAIL
PART B

1. Name of research ship **BELGICA** Cruise N° **2007/02**

2. Date of cruise From **05 February** To **09 February 2007**

3. Purpose of research and general methods. (If the research work is being taken on behalf of a research institution of a third state, it is the responsibility of that state to obtain prior permission; it is essential that written confirmation that this has been done is obtained and quoted in this application.

   **The beam trawl has a bad reputation what concerns the impact on the marine environment. Several scientific studies have demonstrated this. The aim of the project is to decrease the environmental impact and fuel consumption through means of technical adaptations to the fishing gear. Several technical adaptations will be evaluated on board by the research vessel Belgica with the intention, in a second phase, to test the most promising designs in the commercial fishery. The designs to be studies are: 1) T90 cod-end mesh size 90mm and 100mm; 2) large meshes in the top panel. Alternative gears like the outrigger otter trawl will by tried as well. The methods are generally accepted selectivity methods like "catch comparison" or "covered cod-end" with a detailed measurement of the commercial species in the catch and sampling of the non-commercial by-catch.**

4. Attach chart(s) showing (on an appropriate scale) the geographical area of the intended work, positions of intended stations, tracks of survey lines, positions of moored / seabed equipment.

   **See chart**

5. Types of samples required, e.g. Geological / Water / Plankton / Fish / Radioactivity / Isotope ....

   **fish**

   and methods by which samples will be obtained (including dredging/coring/drilling).

   **flatfish beam trawl (twin net) or outrigger otter trawl**

6. Details of moored equipment : **N.A.**

| Dates Laying | Recovery | Description | Latitude | Longitude |
|---|---|---|---|---|

7. Explosives : **N.A.**

   (a) Type and Trade Name
   (b) chemical content
   (c) Dept of trade class and stowage
   (d) Size
   (e) Depth of detonation
   (f) Frequency of detonation
   (g) Dates of detonation

8. Details and reference of

a) Any relevant previous/future cruises

**Belgica cruises 2001/08, 2001/16, 2001/28, 2001/33a, 2002/22 2003/01, 2003/28 and 2003/31, 2004/2a-b, 2004/27, 2004/30, 2005/06, 2005/09, 2006/03**

b) Any previous published research date relating to the proposed cruise (attach separate sheet if necessary)

**Fonteyne, R. and Polet, H., 2002. Reducing the benthos by-catch in flatfish beam trawling by means of technical modifications. Fisheries Research, 55 (1-3) (2002) pp. 219-230**

**Fonteyne, R., Polet, H., Van Marlen, B., Macmullen, Ph. and Swarbrick, J., 1997. Optimisation of a species selective beam trawl. ICES Fish. Technol. Fish. Behav. Work. Group Meeting, Hamburg, Duitsland, april 1997.**

**Anon., 2000. Improving Technical Management in Baltic Cod Fishery (BACOMA). Final report research project FAIR CT 96-1994**

9. Names and addresses of scientist of the coastal state in whose waters the proposed cruise takes place with whom previous contact has been made.

**Dr. Michel J. KAISER, School of Ocean Sciences, University of Wales-Bangor, Menai Bridge, Gwynedd, LL59 SEY, UK**
**Dr. R.S.T. FERRO, Marine Laboratory, Aberdeen, UK**
**Mr. B. van Marlen, RIVO, Haringkade 1, IJmuiden, the Netherlands**
**Gerard Bavouzet, IFREMER, 8, rue François Toullec, F-56100 Lorient, France**

10. State :

(a) Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable.

**YES**

(b) Whether it will be acceptable to carry on board an observer from the coastal state for any part of the cruise and dates and ports of embarkation / disembarkation.

**Yes, see part A §10**

(c) When research data from intended cruise is likely to be made available to the coastal state and if so by what means. (If the final report is likely to be delayed beyond 12 months , interim progress reports are required.

- **Cruise report within 2 months by request to the chief scientist**
- **The research data have been and will be published within the frame of the Fisheries Technology Committee of ICES (see 8b above)**

## PART C : SCIENTIFIC EQUIPMENT

COASTAL STATE : **THE NETHERLANDS**

INDICATE "YES" OR "NO"

| LIST SCIENTIFIC WORK BY FUNCTION<br><br>eg.<br>MAGNETOMETRY :<br>GRAVITY<br>DIVING :<br>SEISMICS:<br>BATHYMETRY SEABED SAMPLING<br>TRAWLING<br>ECHO SOUNDING :<br>WATER SAMPLING<br>U/W T.V. :<br>MOORED INSTRUMENTS:<br>TOWED INSTRUMENTS: | 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 12 NMS | BETWEEN 12-200 NMS | CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN |
| **Trawling with an 8m beam trawl** | **yes** | **yes** | **yes** | **yes** | **yes** | **no** |

## PART C : SCIENTIFIC EQUIPMENT

COASTAL STATE : **UNITED KINGDOM**

INDICATE "YES" OR "NO"

| LIST SCIENTIFIC WORK BY FUNCTION<br><br>eg.<br>MAGNETOMETRY :<br>GRAVITY<br>DIVING :<br>SEISMICS:<br>BATHYMETRY SEABED SAMPLING<br>TRAWLING<br>ECHO SOUNDING :<br>WATER SAMPLING<br>U/W T.V. :<br>MOORED INSTRUMENTS:<br>TOWED INSTRUMENTS: | 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 12 NMS | BETWEEN 12-200 NMS | CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN |
| Trawling with an 8m beam trawl | yes | yes | yes | yes | yes | no |

## PART C : SCIENTIFIC EQUIPMENT

COASTAL STATE : **FRANCE**

INDICATE "YES" OR "NO"

| LIST SCIENTIFIC WORK BY FUNCTION<br><br>eg.<br>MAGNETOMETRY :<br>GRAVITY<br>DIVING :<br>SEISMICS:<br>BATHYMETRY SEABED SAMPLING<br>TRAWLING<br>ECHO SOUNDING :<br>WATER SAMPLING<br>U/W T.V. :<br>MOORED INSTRUMENTS:<br>TOWED INSTRUMENTS: | 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 12 NMS | BETWEEN 12-200 NMS | CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN |
| **Trawling with an 8m beam trawl** | **yes** | **yes** | **Yes** | **yes** | **yes** | **no** |