

NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL ORGANISATION PART A

1. Name of research ship **BELGICA** Cruise N° **2009/32a-b**
2. Dates of cruise From **24 November 2009** To **04 December 2009**
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.", 3° & 23° Linieregimentsplein, 8400 Oostende  
Tel: 32(0)59 70 01 31, Facsimile: 32(0)59 70 49 35  
Email : [bmmost@mumm.ac.be](mailto:bmmost@mumm.ac.be)**
4. Owner **Belgian state represented by Minister for Science Policy**
5. Particulars of ship
- |                 |  |
|-----------------|--|
| Name            | <b>Belgica</b>   |
| Nationality     | Belgian  |
| Overall length  | 51 meters  |
| Maximum draught | 4,5 meters   |
| Nett tonnage    | 232NRT   |
| Propulsion      | Diesel   |
| Call Sign       | ORGQ   |
| Telephone       | INMARSAT 00870 76 218 73 27                                |
| Facsimile       | INMARSAT 00870 32 052 18 12                                |
| Email           | <a href="mailto:belgica@mumm.ac.be">belgica@mumm.ac.be</a> |
6. Crew
- |                |                       |
|----------------|-----------------------|
| Name of master | <b>R. JOOSEN, 1LZ</b> |
| N° of Crew     | <b>15</b>             |
7. Scientific Personnel
- Name and address of scientist in charge :
- Dhr. Hans POLET  
ILVO-Dier-Visserij, Technical Research Unit  
Ankerstraat 1, 8400 OOSTENDE, Belgium  
Tel +32-59-56 98 37; Fax : +32-59-33 06 29  
Email : [hans.polet@ilvo.vlaanderen.be](mailto:hans.polet@ilvo.vlaanderen.be)  
Website : [www.ilvo.vlaanderen.be](http://www.ilvo.vlaanderen.be)**
- N° of scientists : **15**
- (A nominall 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 EC-Research : 6<sup>th</sup> Framework Programme for Research & Technological Development: Reduction of the environmental impact of the sea fishery by technical adjustments to the beamtrawl, alternative stimuli or alternative fishery methods**
10. Port of Call. Dates. Reasons
- |                  |                 |   |
|------------------|-----------------|---|
| <b>Zeebrugge</b> | <b>24/11/09</b> | <b>Departure home port; Start of research cruise 09/32a</b>                                   |
| <b>Lowestoft</b> | <b>27/11/09</b> | <b>Arrival Lowestoft; end of research cruise 09/32a<br/>Relaxation of crew and scientists</b> |
| <b>Lowestoft</b> | <b>30/11/09</b> | <b>Departure port Lowestoft; start of research cruise 09/32b</b>                              |
| <b>Zeebrugge</b> | <b>04/12/09</b> | <b>End of research cruise 09/10</b>   |
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° **2009/32a-b**
2. Dates of cruise From **24 November 2009** To **04 December 2009**

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 first aim of the project is to decrease the environmental impact through means of technical adaptations to the fishing gear. The second aim is to test the feasibility of an alternative stimulus (electric pulses) to reduce bottom contact and thus damage. Finally, alternative fishing methods (e.g. outrigger otter trawl) with reduced impact will be tested.**

**Program supported by FIVA (Flemish Community) Financieringsinstrument voor de Vlaamse Visserij- en Aquicultuursector and EC-Research : 6th Framework Programme for Research & Technological Development**

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, 2006/25, 2007/02, 2007/26, 2007/27, 2008/03, 2008/29, 2009/03, 2009/10**

(b) Any previous published research data 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**

**Polet, H., Fonteyne, R. en Depestele, J., 2005. Milieu en visserij: nood aan een samenlevingscontract met toekomstperspectieven. In: Redant, F., Luyssaert, S., Mees, J. en Seys, J., 2005. Sudiedag: In het oog van de storm: de Vlaamse zeevisserij op de drempel van de 21e eeuw. VLIZ Special publication 21**

**Polet, H., Delanghe, F. and Verschoore, R., 2005. Assessment of the feasibility of electric pulses as an alternative stimulation for brown shrimp (*Crangon crangon*) – laboratory experiments Fisheries Research 72 (2005) 1-12**

**Polet, H., Delanghe, F. and Verschoore, R., 2005. Assessment of the feasibility of electric pulses as an alternative stimulation for brown shrimp (*Crangon crangon*) – sea trials Fisheries Research 72 (2005) 13-27**

**Polet, H., Depestele, J., Stouten, H. and Vanderperren, E., 2006. Moving from beam trawls towards multi-rig ottertrawls – and further... In: Conference on energy efficiency in fisheries, EUROPEAN COMMISSION, DIRECTORATE-GENERAL for FISHERIES and MARITIME AFFAIRS, Brussels, 11-12 May 2006, Conference Center Albert Borschette**

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 5EY, 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, cfr. 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**

## Part C

**SCIENTIFIC EQUIPMENT**COASTAL STATE :**THE NETHERLANDS***(Indicate "YES" or "NO")*

| <u>LIST SCIENTIFIC WORK BY FUNCTION</u>   | 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 |
| 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: |  |  |  |                     |                    |   |
| <b>Trawling with an 8m beam trawl or outrigger otter trawl</b>  | <b>Yes</b>   | <b>Yes</b>                               | <b>Yes</b>   | <b>Yes</b>          | <b>Yes</b>         | <b>No</b>   |

## Part C

**SCIENTIFIC EQUIPMENT**COASTAL STATE : **UNITED KINGDOM***(Indicate "YES" or "NO")*

| 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 12 NMS       | BETWEEN 12-200 NMS | CONTINENTAL SHELF WORK ONLY BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN |
| 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: |  |  |  |                     |                    |   |
| <b>Trawling with an 8m beam trawl<br/>or<br/>outrigger otter trawl</b>  | <b>Yes</b>   | <b>Yes</b>                               | <b>Yes</b>   | <b>Yes</b>          | <b>Yes</b>         | <b>No</b>   |

## Part C

**SCIENTIFIC EQUIPMENT**COASTAL STATE : **FRANCE***(Indicate "YES" or "NO")*

| 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 12 NMS       | BETWEEN 12-200 NMS | CONTINENTAL SHELF WORK ONLY BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN |
| 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: |  |  |  |                     |                    |   |
| <b>Trawling with an 8m beam trawl or outrigger otter trawl</b>  | <b>Yes</b>   | <b>Yes</b>                               | <b>Yes</b>   | <b>Yes</b>          | <b>Yes</b>         | <b>No</b>   |

**Belgica campaign 09/32a-b : chart**

