

NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL  
ORGANISATION  
PART A

1. Name of research ship **BELGICA** Cruise N° **2008/03**
2. Dates of cruise From **11 February** to **15 February 2008**
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° Linierregimentsplein, 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	<b>Belgian</b>
Overall length	<b>51 meters</b>
Maximum draught	<b>4,5 meters</b>
Nett tonnage	<b>232 NRT</b>
Propulsion	<b>Diesel</b>
Call Sign	<b>ORGQ</b>
Telephone	<b>INMARSAT 00870 76 218 73 27</b>
Facsimile	<b>INMARSAT 00870 32 052 18 12</b>
E-mail	<b><a href="mailto:belgica@mumm.ac.be">belgica@mumm.ac.be</a></b>
- 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 / Mevr. Els VANDERPERREN  
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](mailto:hans.polet@ilvo.vlaanderen.be) / [fernand.delanghe@ilvo.vlaanderen.be](mailto: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 and UK continental shelf  
Between 0° and 5° E and 51°35'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.  
**Zeebrugge 11/02 - 15/02 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° **2008/03**
2. Date of cruise From **11 February 2008** To **15 February 2008**
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.**

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, 2006/26, 2007/02, 2007/26, 2007/27**

## 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 Depaele, 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., Depaele, 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**

## 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**

07-JAN-2008 15:11

B3 4

## PART C : SCIENTIFIC EQUIPMENT

COASTAL STATE:

THE NETHERLANDS

INDICATE "YES" OR "NO"

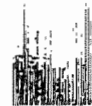
LIST SCIENTIFIC WORK BY FUNCTION	WATER COLUMN INCLUDING SEDIMENT SAMPLING OF THE SEABED	FISHERIES RESEARCH WITHIN FISHING LIMITS	RESEARCH CONCERNING THE NATURAL RESOURCES OF THE CONTINENTAL SHELF OR ITS PHYSICAL CHARACTERISTICS	DISTANCE FROM COAST		
				WITHIN 12 NMS	BETWEEN 12-200 NMS	CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN
eg. MAGNETOMETRY : GRAVITY DIVING : SEISMICS: BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING : WATER SAMPLING U/W T.V. : MOORED INSTRUMENTS: TOWED INSTRUMENTS:						
Trawling with an 8m beam trawl or outrigger otter trawl	yes	yes	yes	yes	yes	no

**PART C : SCIENTIFIC EQUIPMENT**

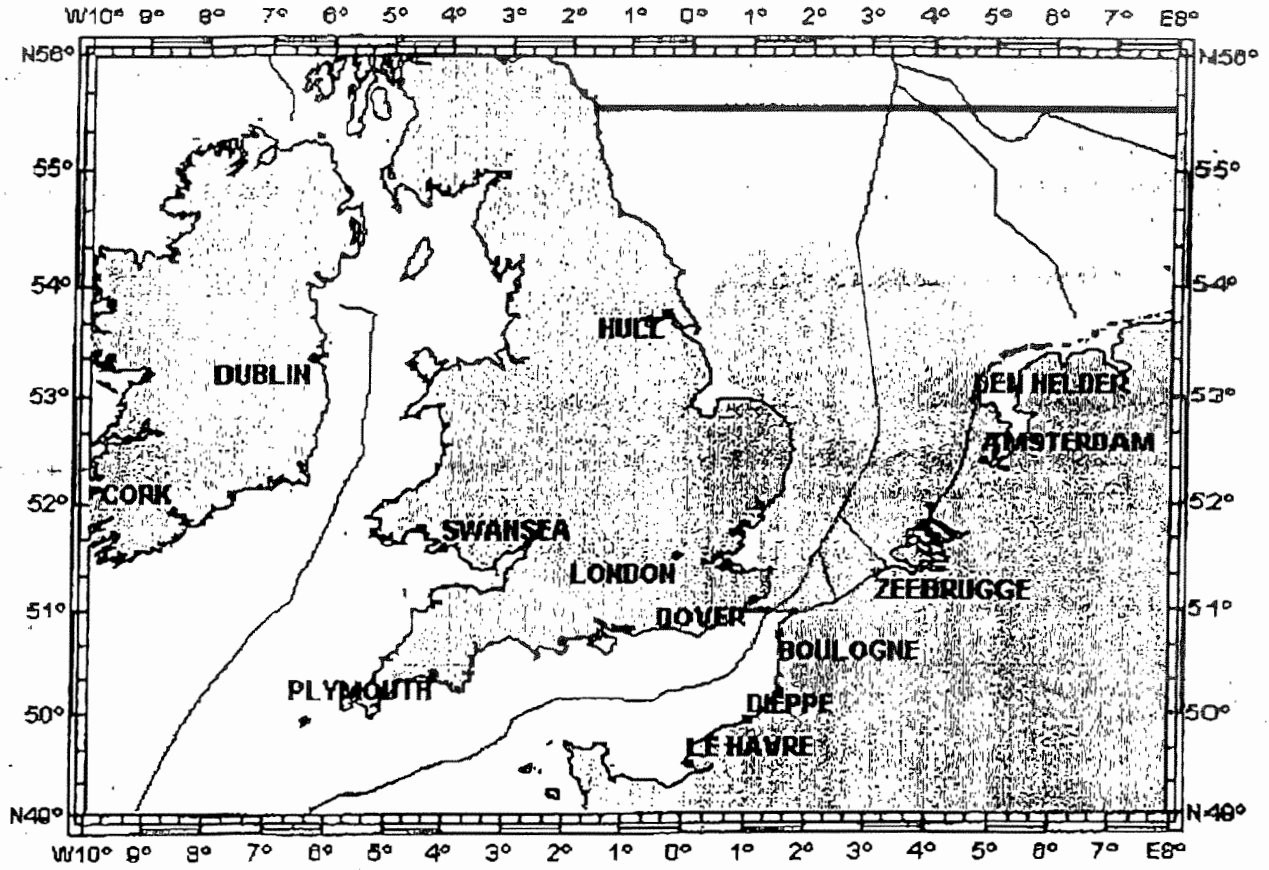
**COASTAL STATE : UNITED KINGDOM**

**INDICATE "YES" OR "NO"**

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



Belgica campaign 08/03 : Chart



Annex A  
Campaigns 08/08

## INTERNATIONAL AFFAIRS / SURVEY / BNS BELGICA / UK EZ - TTW / 01/04 - 04/04/2008

1.

**A. Participating naval unit:** BNS BELGICA A962**B. ship characteristics :** length 51m ; width 10m ; draught 4.6m / displacement 1200 T / masthead 28.6 m /**2. waters to be passed :** UK EZ and TTW**3. Waters****A. entrance in UK EZ/TTW :** 01 APR am near Sunk VTS**B. leaving UK EZ/TTW :** 04 APR Pm near Sunk VTS**4. Anchorage and passage in UK TTW:** requested in case of adverse weather conditions or technical problems**5. Visit to harbour (harbour/period/character):** No**6. Commanding officer :** LT CDR Ron Joosen, 26 sep 2003**7. Crew .**

a. total 30

b. officers: 2

c. cpo : 4

d. rating : 9

e. civilian scientists : 15

**8. Reason for stay in TTW and EZ:** MONITORING/SAMPLING**9. Communications requirements****A.1. frequencies.:** 2461 - 4158 - 6239 - 8330 khz**B.1. transmission mode :** F1b**A.2. frequencies :** 2072 - 4113 - 8752 khz**S.2. transmission mode :** J3e**C. effective output :** 400 watt**D. int call sign :** orgg (oscar romeo golf quebec )**10. n.a.**

**Annex A  
Campaigns 08/03**

**INTERNATIONAL AFFAIRS / SURVEY / BNS BELGICA / UK EZ - TTW / 11/02 - 15/02/2008**

1.

**A. Participating naval unit:** BNS BELGICA A962

**B. ship characteristics:** length 51m, width 10m; draught 4.6m / displacement 1200 T / masthead 28.6 m /

**2. waters to be passed:** UK EZ and TTW

**3. Waters**

**A. entrance in UK EZ/TTW:** 11 feb am near Sunk VTS

**B. leaving UK EZ/TTW:** 15 feb am near Sunk VTS

**4. Anchorage and passage in UK TTW:** requested in case of adverse weather conditions or technical problems

**5. Visit to harbour (harbour/period/character):** No

**6. Commanding officer:** LT CDR Ron Joosen, 26 sep 2003

**7. Crew:**

a. total 30

b. officers: 2

c. cpo: 4

d. rating: 9

e. civilian scientists: 15

**8. Reason for stay in TTW and EZ:** MONITORING/SAMPLING

**9. Communications requirements**

**A.1. frequencies:** 2461 - 4158 - 6239 - 8330 khz

**B.1. transmission mode:** F1b

**A.2. frequencies:** 2072 - 4113 - 8752 khz

**B.2. transmission mode:** J3e

**C. effective output:** 400 watt

**D. int call sign:** orgq (oscar romeo golf quebec)

**10. n.a.**



- Van Den Eynde, D., B. Nechad, M. Fettweis, and F. Francken. SPM dynamics in the Southern North Sea derived from SeaWiFs imagery, in-situ measurements and numerical modelling. In INTERCOH-2003, 2003.
- Van Mol, B. and K. Ruddick. The Compact High Resolution Imaging Spectrometer (CHRIS): the future of hyperspectral satellite sensors. Imagery of Oostende coastal and inland waters, in Airborne Imaging Spectroscopy workshop, 2004, Brugge.
- Van Mol, B., Y. Park, K. Ruddick, and B. Nechad. Mapping of chlorophyll and suspended particulate matter from CHRIS imagery of the Oostende core site, in 2nd ESA/CHRIS Proba workshop, 2004: European Space Agency.
- Vasilkov, A.P., 1997. A retrieval of coastal water constituent concentrations by least-square inversion of a radiance model. In "Proceedings of the 4th International Conference on Remote Sensing for Marine and Coastal Environments (Environmental Research Institute of Michigan)", Vol. II, p107-116.
- Vasilkov, A.P., V.I. Burenkov, and K.G. Ruddick, 1999. The spectral reflectance and transparency of river plume waters. Int. J. Remote Sensing, Vol. 20, No. 13, pp. 2497-2508