

NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL ORGANISATION PART A

1. Name of research ship **BELGICA** Cruise N° **2006/19**
2. Dates of cruise From **18 September** to **22 September 2006**
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	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
Email	belgica@mumm.ac.be
6. Crew
 

Name of master	<b>L. GOUSSAERT, KVK</b>
N° of Crew	<b>15</b>
7. Scientific Personnel
 

Name and address of scientist in charge :

**Barbara Van Mol  
Belgian Royal Institute of Natural Sciences  
Management Unit of the North Sea Mathematical Models  
"M.U.M.M."  
Gulledelle 100 B-1200 Brussels  
Telephone : 02/773 21 34 ; facsimile : 02/770 69 72; email : [B.Vanmol@mumm.ac.be](mailto:B.Vanmol@mumm.ac.be)**

N° of scientists **15**

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

<b>Rosa Astoreca (Chile)</b>	<b>JoungJe Park (Korean)</b>	
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8. Geographical area in which ship will operate (with reference in latitude and longitude).
 

**Belgian, French, Dutch and UK Continental Shelves  
Box with corners at N 50°30', E 1°00 and N 52°00, E 3°30'**

9. Brief description of purpose of cruise

**Purpose a) (main purpose)**

**Belgian national funded research project within the Research programme for earth observation STEREO: “Study and management of coastal regions”**

**Project “BEL-COLOUR”: Optical Remote Sensing of coastal waters**

Purpose b) (only in Belgian waters)

National structural programmes of MUMM and PODO/PADDII. Project “OURS” Onboard Underway Registration of Samples

Purpose c) (only in Belgian waters)

Study of the impact of sand extraction on the Belgian Continental Shelf and in the Belgian territorial waters

10. Port of Call. Dates. Reasons.

**Zeebrugge**

**18/09/22/09**

**Departure-Arrival**

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° **2006/19**
2. Date of cruise From **18 September** To **22 September 2006**
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.

#### **Purpose a)**

**The BEL-COLOUR project, funded by the Belgian Federal Science Policy Office (previous OSTC), aims at improving the theoretical basis and software tools for applications of suspended matter and chlorophyll-based satellite data products in coastal waters. In addition to algorithm work and image processing BEL-COLOUR participates in seaborne cruises for the purposes of calibration of algorithms and for validation of the end products.**

**Purpose b) and c) : only in Belgian waters (cfr. Part A §9)**

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 in Annex 1**

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

#### **Water**

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

**Niskin bottle, In situ measurements (SCTD, Secchi disk...),  
spectroradiometric measurements (above water)**

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

Dates		Description	Latitude	Longitude
Laying	Recovery			

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

**Project BEL-COLOUR : Belgica cruise 2002/07, 2002/09, 2002, 2002/14, 2003/06, 2003/16, 2003/19 and 2003/22, 2004/10b, 2004/16, 2005/08, 2005/16, 2005/19, 2006/08**

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

**See Annex 2**

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.

**BELCOLOUR - NL**

**Dr Steef Peters**, Instituut voor Milieuvraagstukken, Vrije Universiteit Amsterdam, De Boelelaan 1115, 1081 HV, Amsterdam, Netherlands

**Tel: ++31 20 444 9555, Fax: +31 20 444 9553 , Email: Steef.Peters@ivm.vu.nl**

**BELCOLOUR - FR**

**Dr Hubert Loisel**, Laboratoire ELICO, UMR -CNRS/ULCO 8013, Maison de la Recherche en Environnement Naturel, 32 Avenue Foch, 62930 Wimereux, France

email: [loisel@mren2.univ-littoral.fr](mailto:loisel@mren2.univ-littoral.fr) Tél : 03 20 33 61 89 ; Fax : 03 21 99 64 01

**BELCOLOUR - UK**

**Dr. Gavin Tilstone**, Remote Sensing Group, Plymouth Marine Laboratory, Prospect Place, West Hoe, PLYMOUTH PL1 3DH, UK, Tel : +44 1752 633 406; facsimile +44 1752 633 101; email : [ghti@pml.ac.uk](mailto:ghti@pml.ac.uk)

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, Zeebrugge 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 available within 2 months (on request)**
- **Reflectance, chlorophyll and suspended matter data will be made available on request to scientists of the coastal state within one year.**

PART C :                    **SCIENTIFIC EQUIPMENT**

COASTAL STATE :                    **THE NETHERLANDS**

INDICATE "YES" OR "NO"

<u>LIST SCIENTIFIC WORK BY FUNCTION</u>				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 :	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			
<b>Niskin water bottles</b>	YES	NO	YES	YES	YES	NO
<b>in situ measurements (SCTD, .. and optical properties)</b>	YES	NO	YES	YES	YES	NO
<b>spectroradiometer Trios</b>	YES	NO	NO	YES	YES	NO
<b>Secchi disk</b>	YES	NO	NO	YES	YES	NO

PART C :                **SCIENTIFIC EQUIPMENT**

COASTAL STATE :                                **FRANCE**

INDICATE "YES" OR "NO"

<u>LIST SCIENTIFIC WORK BY FUNCTION</u>				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 :	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			
<b>Niskin water bottles</b>	YES	NO	YES	YES	YES	NO
<b>in situ measurements (SCTD, .. and optical properties)</b>	YES	NO	YES	YES	YES	NO
<b>spectroradiometer Trios</b>	YES	NO	NO	YES	YES	NO
<b>Secchi disk</b>	YES	NO	NO	YES	YES	NO

PART C :                    **SCIENTIFIC EQUIPMENT**

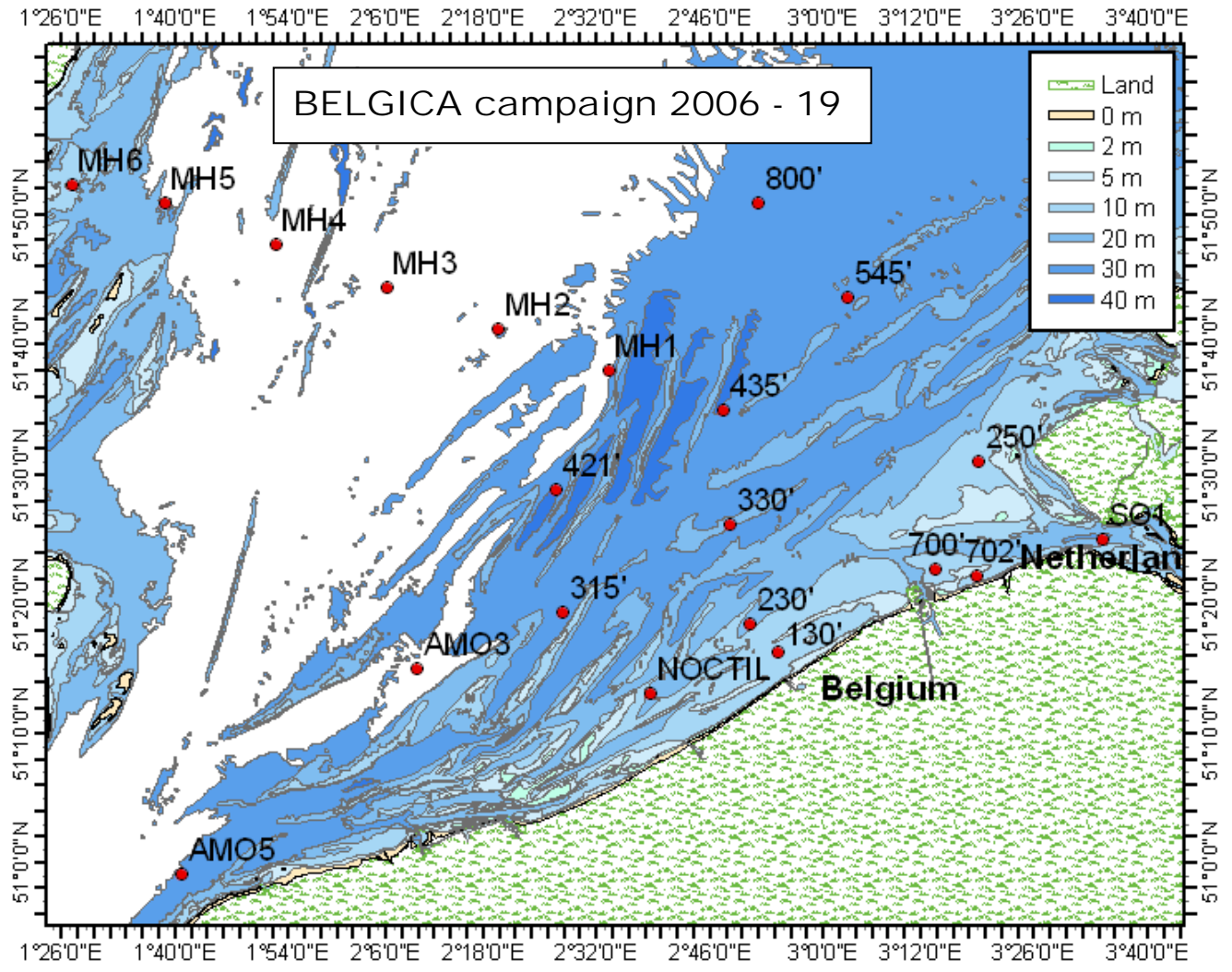
COASTAL STATE :                    **UNITED KINGDOM**

INDICATE "YES" OR "NO"

<u>LIST SCIENTIFIC WORK BY FUNCTION</u>				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 :	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			
<b>Niskin water bottles</b>	YES	NO	YES	YES	YES	NO
<b>in situ measurements (SCTD, .. and optical properties)</b>	YES	NO	YES	YES	YES	NO
<b>spectroradiometer Trios</b>	YES	NO	NO	YES	YES	NO
<b>Secchi disk</b>	YES	NO	NO	YES	YES	NO

# Annex 1

## Chart – Belgica 2006/19





## **Annex 2. Références**

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## Annex A

Campaigns 06/19

### INTERNATIONAL AFFAIRS / SURVEY / BNS BELGICA / UK TTW/ 18/09 – 22/09/ 2006.

1. **A. Participating naval unit:** BNS BELGICA (A 962)  
**B. Ship's characteristics:** length 51m / beam 10m / draught 4.6m / masthead height 28.6m /  
Displacement 1200 T
2. **Waters to be passed:** UK TTW
3. **Waters :**  
A. Entrance UK TTW : 18 SEP PM near HARWICH  
B. Leaving UK TTW : 22 SEP AM near HARWICH
4. **Anchorage in UK TW:** in case of adverse weather or technical problems
5. **Visit to harbour (harbour / period / character):** nihil
6. **Commanding officer:** CDR Lieven GOUSSAERT ( Jun 06)
7. **Crew:**  
A. Total crew: 30  
B. Officers: 2  
C. Crew: 13  
D. Civilian scientists: 15
8. **Reason for visit:** NIHIL  
**Reason for stay in TW :** MONITORING / SAMPLING
9. **Communication requirements :**  
A.1. Frequencies: 2461K3, 4158K8, 6239K0, 8330k4  
A.2. Frequencies: 2072k1, 4113k9, 8752k2  
B.1. Transmission mode: F1B  
B.2. Transmission mode: J3E  
C. Effective output: 400 Watt  
D. International call sign: OSCAR ROMEO GOLF QUEBEC  
E. Receiver station: OSN
10. **Organic aircraft:** nil
11. **Logistic requirements:** nil
12. **Summary of survey:** See para 9 of NPRC (annexe B )