

NOTIFICATION OF PROPOSED RESEARCH CRUISE**PART A : GENERAL ORGANISATION**

1. Name of research ship **RV BELGICA** Cruise N° **2016/14ab**
2. Dates of cruise From **05 September** to **16 September 2016**
3. Operating Authority **Belgian Navy under contract for Belgian Ministry of Science Policy
Royal Belgian Institute for Natural Sciences 'RBINS'
Operational Directorate, Natural Environment, Measurement Services Ostend
3de & 23ste Linierregimentsplein, 8400 Oostende
☎ + 32 59 70 01 31 • 📠 + 32 59 70 49 35 • ✉ mso@odnature.be
odnature.naturalsciences.be/belgica**
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 |
| Email | belgica@mumm.ac.be | |
6. Crew
- | | |
|----------------|--|
| Name of master | Lieutenant Commander (BeN) Bernard TABUREAU |
| N° of Crew | 15 |
7. Scientific Personnel
- Name and address of scientists in charge :
- Mr Kelle MOREAU
Institute for Agricultural and Fisheries Research 'ILVO'
Animal Sciences, Fisheries and Aquatic Productions
Ankerstraat 1, 8400 Ostend, Belgium
☎ +32-59-56 98 30 • 📠 +32-59-33 06 29 • ✉ kelle.moreau@ilvo.vlaanderen.be
www.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, French and UK Continental Shelves

N 51°00, E 0°30, N 54°00, W 3°00

9. Brief description of purpose of cruise

Survey of the adult flatfish stocks in the southern North Sea as part of the 'North Sea Beam Trawl Survey'.

10. Port of Call. Dates. Reasons.

Zeebrugge	05/09 a.m.	Departure homeport Zeebrugge. Start of RV Belgica research cruise 2016/14a
Great Yarmouth	09/09 p.m.	Arrival harbor Great Yarmouth. End of RV Belgica research cruise 2016/14a
Great Yarmouth	10/09-11/09	Relaxation of crew RV Belgica and scientists.
Great Yarmouth	12/09 a.m.	Departure harbor Great Yarmouth. Start of RV Belgica research cruise 2016/14b
Zeebrugge	16/09 p.m.	Arrival homeport Zeebrugge. End of RV Belgica research cruise 2016/14b

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

N.A.

NOTIFICATION OF PROPOSED RESEARCH CRUISE**PART B: DETAIL**

1. Name of research ship **BELGICA** Cruise N° **2016/14ab**
2. Date of cruise From **05 September** To **16 September 2016**
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.

Since 1985, the ILVO research group on Fisheries Biology performs fishery-independent surveys of the adult flatfish stocks (primarily plaice and sole) in the southern North Sea. Each year, approx. 62 stations are sampled. All invertebrates and fish are sorted by species, and then counted. All fish species and invertebrates are also measured for length, and individual weights are recorded for all commercial species. For cod, plaice, sole, turbot and brill, otoliths are taken for age determination (for each species 3 otoliths per cm size class within each of the 14 visited ICES rectangles). On an annual basis, the data are exchanged at the Working Group on Beam Trawl Surveys (WGBEAM), a group which is coordinated by the International Council for the Exploration of the Sea (ICES), and they are uploaded in the ICES-database DATRAS (<http://datras.ices.dk>) from 2012 onwards. The survey is a compulsory part of the Belgian National Data Gathering Program, in fulfillment of the requirements of EC Regulations no. 199/2008.

4. Attach chart(s) showing (on an appropriate scale) the² geographical area of the intended work, positions of intended stations, tracks of survey lines, positions of moored / seabed equipment.

See Annex: chart + positions in Table 1

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

Fish and commercial invertebrates

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

Beam trawling

6. Details of moored equipment :

Laying	Recovery	Description	Dates	
			Latitude	Longitude

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

(a) Type and Trade Name
(c) Dept of trade class and stowage
(e) Depth of detonation
(g) Dates of detonation

(b) chemical content
(d) Size
(f) Frequency of detonation

8. Details and reference of

(a) Any relevant previous/future cruises

RV Belgica cruises 92/19, 93/19, 94/19, 95/19, 96/19, 97/17, 98/16, 99/18, 2000/20, 2001/21, 2002/18, 2003/20, 2004/18, 2005/19, 2007/18, 2008/19, 2009/22, 2010/21, 2011/22, 2012/22, 2013/23, and 2014/21

(b) Any previous published research data relating to the proposed cruise

ICES. 2009. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2009/LRC:04.

ICES. 2010. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2010/ SSGESST:17.

ICES. 2011. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2011/ SSGESST:14.

ICES. 2012. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2012/ SSGESST:11.

ICES. 2013. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2013/ SSGESST:12.

ICES. 2014. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2014/ SSGESST:09.

ICES. 2015. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2015/ SSGIEOM:20.

All these reports can be downloaded at:

<http://www.ices.dk/publications/library/Pages/default.aspx#K=WGBEAM>

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.

UNITED KINGDOM

Mr. Ian HOLMES, CEFAS, Lowestoft, Suffolk NR33 OHT

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FRANCE

Mr. Franck COPPIN, IFREMER, 150 quai Gambetta, 62200 Boulogne-sur-Mer

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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: 1 month after end of campaign**

PART C : SCIENTIFIC EQUIPMENTCOASTAL STATE : **UNITED KINGDOM**

INDICATE "YES" OR "NO"

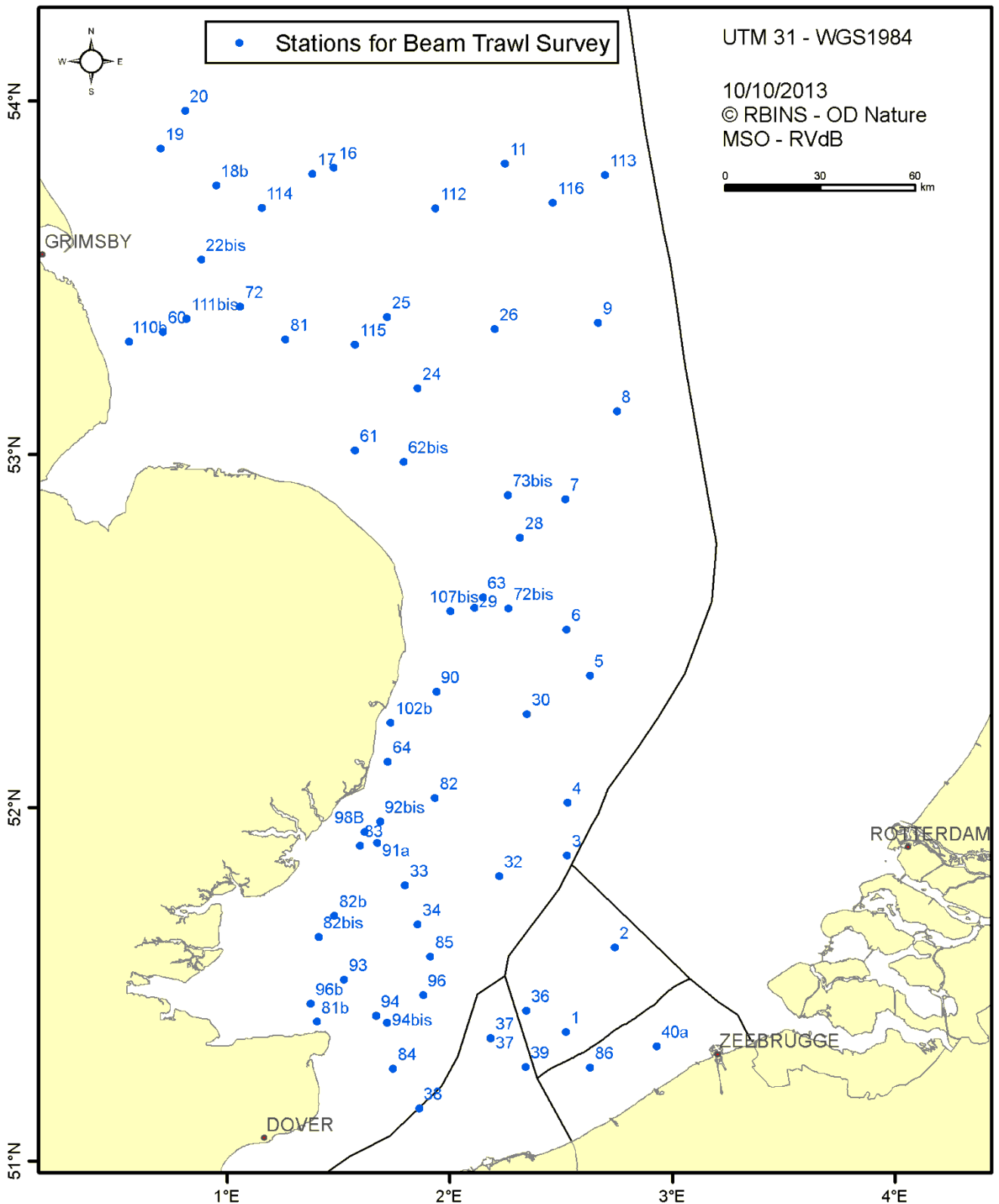
<u>LIST SCIENTIFIC WORK BY FUNCTION</u>				DISTANCE FROM COAST		
				WITHIN 12 NMS	BETWEEN 12-200 NMS	CONTINENTAL SHELF WORK ONLY) BEYOND 200 NM BUT WITHIN THE CONTINENTAL MARGIN
eg. MAGNETOMETRY : GRAVITY DIVING : SEISMICS: BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING : WATER SAMPLING U/W T.V. : 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			
4 m beam trawl with chain net & CTD	No	Yes	No	Yes	Yes	No

PART C : SCIENTIFIC EQUIPMENTCOASTAL 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			
4 m beam trawl with chain net & CTD	No	Yes	No	Yes	Yes	No

ANNEX:

RV Belgica research cruise 2016/14a-b: chart



RV Belgica research cruise 2015/14aa-b : Table 1 (positions)

Station	Position	Latitude		Longitude		Latitude	Longitude
		°	'	°	'	(deci.)	(deci)
40a	51°21.30N-002°55.82E	51	21.30	2	55.82	51,36	2,93
86	51°18.10N-002°37.87E	51	18.10	2	37.87	51,30	2,63
39	51°17.80N-002°20.50E	51	17.80	2	20.50	51,30	2,34
1	51°24.10N-002°31.37E	51	24.10	2	31.37	51,40	2,52
36	51°27.80N-002°20.67E	51	27.80	2	20.67	51,46	2,34
37	51°22.75N-002°11.01E	51	22.75	2	11.01	51,38	2,18
2	51°38.52N-002°44.35E	51	38.52	2	44.35	51,64	2,74
3	51°53.75N-002°31.20E	51	53.75	2	31.20	51,90	2,52
4	52°03.03N-002°30.92E	52	03.03	2	30.92	52,05	2,52
32	51°50.37N-002°12.46E	51	50.37	2	12.46	51,84	2,21
37	51°22.75N-002°11.02E	51	22.75	2	11.02	51,38	2,18
38	51°11.02N-001°51.75E	51	11.02	1	51.75	51,18	1,86
84	51°17.20N-001°44.19E	51	17.20	1	44.19	51,29	1,74
96	51°29.93N-001°52.10E	51	29.93	1	52.10	51,50	1,87
94	51°26.33N-001°39.88E	51	26.33	1	39.88	51,44	1,66
94bis	51°25.00N-001°42.31E	51	25.00	1	42.31	51,42	1,71
93	51°32.47N-001°30.89E	51	32.47	1	30.89	51,54	1,51
81b	51°25.14N-001°23.47E	51	25.14	1	23.47	51,42	1,39
96b	51°28.10N-001°21.66E	51	28.10	1	21.66	51,47	1,36
82b	51°43.15N-001°27.47E	51	43.15	1	27.47	51,72	1,46
82bis	51°39.50N-001°23.37E	51	39.50	1	23.37	51,66	1,39
85	51°36.50N-001°54.17E	51	36.50	1	54.17	51,61	1,90
34	51°41.74N-001°50.19E	51	41.74	1	50.19	51,70	1,84
33	51°48.66N-001°46.59E	51	48.66	1	46.59	51,81	1,78
91a	51°55.69N-001°39.16E	51	55.69	1	39.16	51,93	1,65
83	51°54.90N-001°34.26E	51	54.90	1	34.26	51,92	1,57
98B	51°57.47N-001°35.27E	51	57.47	1	35.27	51,96	1,59
92bis	51°59.48N-001°39.86E	51	59.48	1	39.86	51,99	1,66
81	53°21.08N-001°10.38E	53	21.08	1	10.38	53,35	1,17
82	52°03.36N-001°54.37E	52	03.36	1	54.37	52,06	1,91
64	52°09.72N-001°41.45E	52	09.72	1	41.45	52,16	1,69
102b	52°16.30N-001°41.79E	52	16.30	1	41.79	52,27	1,70
90	52°21.79N-001°54.79E	52	21.79	1	54.79	52,36	1,91
107bis	52°35.36N-001°57.96E	52	35.36	1	57.96	52,59	1,97
29	52°35.91N-002°04.80E	52	35.91	2	04.80	52,60	2,08
63	52°37.50N-002°07.38E	52	37.50	2	07.38	52,63	2,12
30	52°18.05N-002°19.83E	52	18.05	2	19.83	52,30	2,33
5	52°24.83N-002°37.32E	52	24.83	2	37.32	52,41	2,62
6	52°32.66N-002°30.36E	52	32.66	2	30.36	52,54	2,51
28	52°48.26N-002°17.18E	52	48.26	2	17.18	52,80	2,29
73bis	52°55.15N-002°13.89E	52	55.15	2	13.89	52,92	2,23
7	52°54.40N-002°30.07E	52	54.40	2	30.07	52,91	2,50
72bis	52°36.26N-002°14.19E	52	36.26	2	14.19	52,60	2,24

Station	Position	Latitude		Longitude		Latitude	Longitude
		°	'	°	'	(deci.)	(deci)
62bis	53°00.64N-001°44.44E	53	00.64	1	44.44	53,01	1,74
61	53°02.67N-001°30.67E	53	02.67	1	30.67	53,04	1,51
8	53°09.63N-002°44.35E	53	09.63	2	44.35	53,16	2,74
9	53°24.45N-002°39.10E	53	24.45	2	39.10	53,41	2,65
116	53°45.00N-002°25.61E	53	45.00	2	25.61	53,75	2,43
113	53°50.00N-002°40.79E	53	50.00	2	40.79	53,83	2,68
11	53°51.66N-002°12.19E	53	51.66	2	12.19	53,86	2,20
112	53°43.78N-001°52.29E	53	43.78	1	52.29	53,73	1,87
16	53°50.62N-001°22.57E	53	50.62	1	22.57	53,84	1,38
17	53°49.28N-001°17.05E	53	49.28	1	17.05	53,82	1,28
114	53°43.22N-001°02.50E	53	43.22	1	02.50	53,72	1,04
24	53°13.32N-001°47.82E	53	13.32	1	47.82	53,22	1,80
25	53°25.24N-001°38.99E	53	25.24	1	38.99	53,42	1,65
26	53°23.40N-002°09.60E	53	23.40	2	09.60	53,39	2,16
115	53°20.55N-001°29.95E	53	20.55	1	29.95	53,34	1,50
18b	53°46.66N-000°49.14E	53	46.66	0	49.14	53,78	0,82
19	53°52.61N-000°32.92E	53	52.61	0	32.92	53,88	0,55
20	53°59.43N-000°39.38E	53	59.43	0	39.38	53,99	0,66
22bis	53°34.16N-000°45.85E	53	34.16	0	45.85	53,57	0,76
111bis	53°23.81N-000°41.72E	53	23.81	0	41.72	53,40	0,70
72	53°26.52N-000°56.87E	53	26.52	0	56.87	53,44	0,95
60	53°21.39N-000°35.58E	53	21.39	0	35.58	53,36	0,59
110b	53°19.96N-000°25.64E	53	19.96	0	25.64	53,33	0,43