

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

1. Name of research ship **RV BELGICA** Cruise N° **2020/21ab**
2. Dates of cruise From **24 August** To **04 September 2020**
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 en 23ste Linieregimentsplein, B-8400 Ostend  
☎ + 32(0)59 70 01 31 • 📠: + 32(0)59 70 49 35 • ✉ [mso@naturalsciences.be](mailto:mso@naturalsciences.be)  
<https://odnature.naturalsciences.be/belgica/>**
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  |
| Phone numbers   | Voice GSM +32 475 44 27 37<br>Voice VSAT: +31 108 08 00 68<br>Voice Fleet 77: +870 76 463 27 41 |
| Fax numbers     | Fax harbor: +32 50 54 59 79<br>Fax Fleet 77 (at sea): +870 76 463 27 43                         |
| Email           | <a href="mailto:rvbelgica@naturalsciences.be">rvbelgica@naturalsciences.be</a>                  |
6. Crew
- |                |                                      |
|----------------|--------------------------------------|
| Name of master | <b>Commander (BeN) Ludwig Damman</b> |
| N° of Crew     | <b>15</b>                            |
7. Scientific Personnel
- Name and address of scientist in charge :
- [Miss Noémi VAN BOGAERT](#)**  
**Institute for Agricultural and Fisheries Research 'ILVO'**  
**Animal Sciences, Fisheries and Aquatic Productions**  
**Ankerstraat 1, 8400 Ostend, Belgium**  
**☎ +32-59-56 98 29 • 📠 +32-59-33 06 29 •**  
**✉ [noemi.vanbogaert@ilvo.vlaanderen.be](mailto:noemi.vanbogaert@ilvo.vlaanderen.be)**  
**[www.ilvo.vlaanderen.be](http://www.ilvo.vlaanderen.be)**
- Mrs Lies VANSTEENBRUGGE**  
**Institute for Agricultural and Fisheries Research 'ILVO'**  
**Animal Sciences, Fisheries and Aquatic Productions**  
**Ankerstraat 1, 8400 Ostend, Belgium**  
**☎ +32-59-56 98 11 • 📠 +32-59-33 06 29 •**  
**✉ [lies.vansteenbrugge@ilvo.vlaanderen.be](mailto:lies.vansteenbrugge@ilvo.vlaanderen.be)**  
**[www.ilvo.vlaanderen.be](http://www.ilvo.vlaanderen.be)**
- Mrs Els TORREELE**  
**Institute for Agricultural and Fisheries Research 'ILVO'**  
**Animal Sciences, Fisheries and Aquatic Productions**  
**Ankerstraat 1, 8400 Ostend, Belgium**  
**☎ +32-59-56 98 33 • 📠 +32-59-33 06 29 •**  
**✉ [els.torrele@ilvo.vlaanderen.be](mailto:els.torrele@ilvo.vlaanderen.be)**  
**[www.ilvo.vlaanderen.be](http://www.ilvo.vlaanderen.be)**
- N° of scientists : **10**

*(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, 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

<b>Zeebrugge</b>	<b>24/08/20 am</b>	<b>Departure homeport. Start of research cruise RV Belgica 2020/21a</b>
<b>Ipswich</b>	<b>29/08/20 pm</b>	<b>Arrival in port. End of research cruise RV Belgica 2020/21a</b>
<b>Ipswich</b>	<b>29-30/08/20</b>	<b>Mid-survey break for crew and scientists</b>
<b>Ipswich</b>	<b>31/08/20 am</b>	<b>Departure from port. Start of research cruise RV Belgica 2020/21b</b>
<b>Zeebrugge</b>	<b>04/09/20 am</b>	<b>Arrival homeport. End of research cruise RV Belgica 2020/21b</b>

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 **RV BELGICA** Cruise N° **2020/21ab**

2. Dates of cruise From **24 August** To **04 September 2020**

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-Fisheries 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, 62 stations are sampled. All invertebrates and fish are sorted by species, and then counted. All commercial species and non-commercial fish are also measured for length. For plaice, sole, turbot, brill, cod, dab and lemon sole otoliths are taken for age determination (for each species approximately 3 otoliths per cm size class in 14 separate geographical units). Since 2011 marine litter is also documented. 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 2004 onwards. The survey is a compulsory part of the Belgian National Data Gathering Program, in fulfilment of the requirements of EC Regulation no. 199/2008.

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. Attach chart with list of positions (+ geographical references)

**See Annex 1 (Chart + table with positions)**

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

**Fish, commercial invertebrates, epibenthos and litter**

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

**4 m beam 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

**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, 2014/21, 2017/26, 2018/19ab, 2019/21ab**

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

**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.**  
**ICES. 2016. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2016/SSGIEOM:20.**  
**ICES. 2017. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2017/EOSG:06**  
**ICES. 2018. Report of the Working Group on Beam Trawl Surveys (WGBEAM). ICES CM 2018/EOSG:05**

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****☎ +44 1502 524254 • 📠 44 1502 513865 • ✉ ian.holmes@cefas.co.uk****FRANCE****Mr. Franck COPPIN, IFREMER, 150 quai Gambetta, 62200 Boulogne-sur-Mer****☎ +33 3 2199 5610 • 📠 +33 3 2199 5601 • ✉ franck.coppin@ifremer.be**

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.

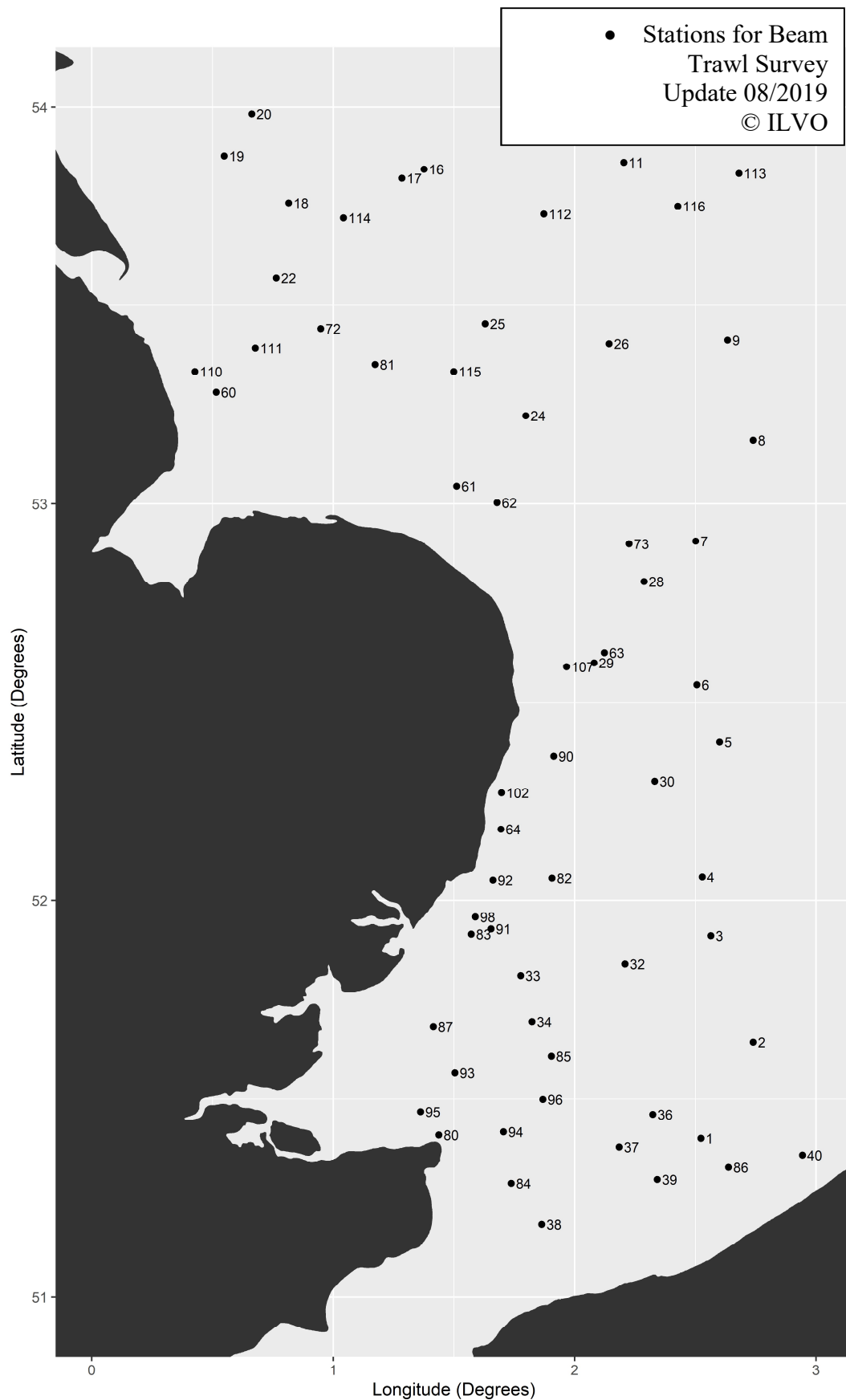
**Cruise report within 1 month by request to the chief scientist**

**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. MAGNETOMETRY : GRAVITY DIVING : SEISMICS: BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING : WATER SAMPLING U/W T.V. : MOORED INSTRUMENTS: TOWED INSTRUMENTS:						
<b>4 m beam trawl with chain net &amp; CTD</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>

**Part C: SCIENTIFIC EQUIPMENT**COASTAL STATE : **FRANCE***(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. MAGNETOMETRY : GRAVITY DIVING : SEISMICS: BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING : WATER SAMPLING U/W T.V. : MOORED INSTRUMENTS: TOWED INSTRUMENTS:						
<b>4 m beam trawl with chain net &amp; CTD</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>

**Annex 1:****RV Belgica research cruise 2020/21ab: chart**



**RV Belgica research cruise 2020/21ab : table with positions**

Station	Position		Latitude		Longitude		Latitude	Longitude
			°	'	°	'	dec.	dec.
1	N 51°24.07	E 002°31.37	51	24.07	2	31.37	51.40	2.52
2	N 51°38.52	E 002°44.35	51	38.52	2	44.35	51.64	2.74
3	N 51°54.64	E 002°33.82	51	54.64	2	33.82	51.91	2.56
4	N 52°03.53	E 002°31.65	52	03.53	2	31.65	52.06	2.53
5	N 52°24.00	E 002°36.00	52	24.00	2	36.00	52.40	2.60
6	N 52°32.66	E 002°30.37	52	32.66	2	30.37	52.54	2.51
7	N 52°54.40	E 002°30.07	52	54.40	2	30.07	52.91	2.50
8	N 53°09.63	E 002°44.35	53	09.63	2	44.35	53.16	2.74
9	N 53°24.71	E 002°37.99	53	24.71	2	37.99	53.41	2.63
11	N 53°51.66	E 002°12.19	53	51.66	2	12.19	53.86	2.20
16	N 53°50.62	E 001°22.58	53	50.62	1	22.58	53.84	1.38
17	N 53°49.27	E 001°17.05	53	49.27	1	17.05	53.82	1.28
18	N 53°45.46	E 000°48.92	53	45.46	0	48.92	53.76	0.82
19	N 53°52.61	E 000°32.90	53	52.61	0	32.90	53.88	0.55
20	N 53°58.96	E 000°39.74	53	58.96	0	39.74	53.98	0.66
22	N 53°34.16	E 000°45.85	53	34.16	0	45.85	53.57	0.76
24	N 53°13.32	E 001°47.82	53	13.32	1	47.82	53.22	1.80
25	N 53°27.21	E 001°37.71	53	27.21	1	37.71	53.45	1.63
26	N 53°24.18	E 002°08.52	53	24.18	2	08.52	53.40	2.14
28	N 52°48.26	E 002°17.19	52	48.26	2	17.19	52.80	2.29
29	N 52°35.91	E 002°04.80	52	35.91	2	04.80	52.60	2.08
30	N 52°18.04	E 002°19.83	52	18.04	2	19.83	52.30	2.33
32	N 51°50.37	E 002°12.46	51	50.37	2	12.46	51.84	2.21
33	N 51°48.66	E 001°46.58	51	48.66	1	46.58	51.81	1.78
34	N 51°41.70	E 001°49.40	51	41.70	1	49.40	51.70	1.82
36	N 51°27.64	E 002°19.37	51	27.64	2	19.37	51.46	2.32
37	N 51°22.75	E 002°11.02	51	22.75	2	11.02	51.38	2.18
38	N 51°11.02	E 001°51.75	51	11.02	1	51.75	51.18	1.86
39	N 51°17.80	E 002°20.50	51	17.80	2	20.50	51.30	2.34
40	N 51°21.56	E 002°56.60	51	21.56	2	56.60	51.36	2.94
60	N 53°21.36	E 000°33.99	53	21.36	0	33.99	53.36	0.57
61	N 53°02.67	E 001°30.67	53	02.67	1	30.67	53.04	1.51
62	N 53°00.16	E 001°40.65	53	00.16	1	40.65	53.00	1.68
63	N 52°37.49	E 002°07.38	52	37.49	2	07.38	52.62	2.12
64	N 52°10.71	E 001°41.62	52	10.71	1	41.62	52.18	1.69
72	N 53°26.52	E 000°56.87	53	26.52	0	56.87	53.44	0.95
73	N 52°54.00	E 002°13.50	52	54.00	2	13.50	52.90	2.23
81	N 53°21.08	E 001°10.38	53	21.08	1	10.38	53.35	1.17
80	N 51°24.56	E 001°26.22	51	24.56	1	26.22	51.41	1.44
82	N 52°03.37	E 001°54.37	52	03.37	1	54.37	52.06	1.91
87	N 51°41.00	E 001°24.85	51	41.00	1	24.85	51.68	1.41
83	N 51°54.90	E 001°34.26	51	54.90	1	34.26	51.92	1.57
84	N 51°17.20	E 001°44.20	51	17.20	1	44.20	51.29	1.74
85	N 51°36.50	E 001°54.17	51	36.50	1	54.17	51.61	1.90
86	N 51°19.70	E 002°38.21	51	19.70	2	38.21	51.33	2.64

90	N 52°21.79	E 001°54.79	52	21.79	1	54.79	52.36	1.91
91	N 51°55.69	E 001°39.17	51	55.69	1	39.17	51.93	1.65
92	N 52°03.04	E 001°39.63	52	03.04	1	39.63	52.05	1.66
93	N 51°34.00	E 001°30.25	51	34.00	1	30.25	51.57	1.50
94	N 51°25.00	E 001°42.31	51	25.00	1	42.31	51.42	1.71
96	N 51°29.93	E 001°52.10	51	29.93	1	52.10	51.50	1.87
95	N 51°28.10	E 001°21.66	51	28.10	1	21.66	51.47	1.36
98	N 51°57.47	E 001°35.28	51	57.47	1	35.28	51.96	1.59
102	N 52°16.30	E 001°41.79	52	16.30	1	41.79	52.27	1.70
107	N 52°35.36	E 001°57.97	52	35.36	1	57.97	52.59	1.97
110	N 53°19.96	E 000°25.64	53	19.96	0	25.64	53.33	0.43
111	N 53°23.50	E 000°40.60	53	23.50	0	40.60	53.39	0.68
112	N 53°43.78	E 001°52.29	53	43.78	1	52.29	53.73	1.87
113	N 53°50.00	E 002°40.79	53	50.00	2	40.79	53.83	2.68
114	N 53°43.22	E 001°02.50	53	43.22	1	02.50	53.72	1.04
115	N 53°20.00	E 001°29.95	53	20.00	1	29.95	53.33	1.50
116	N 53°45.00	E 002°25.60	53	45.00	2	25.60	53.75	2.43