NOTIFICATION OF PROPOSED RESEARCH CRUISE

1. Name of research ship SIMON STEVIN Cruise	lo 18-060
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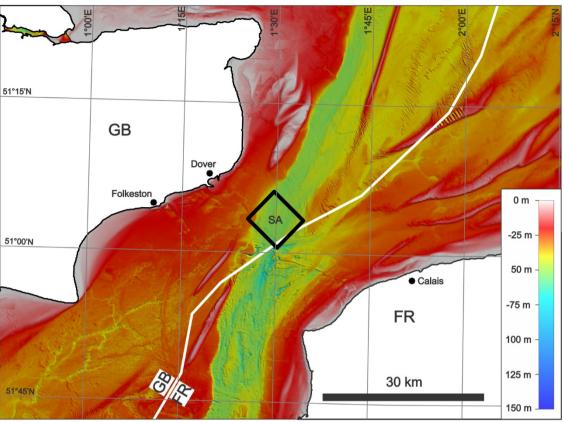
- 2. Dates of cruise From 5 February To 9 February 2018
- 3. Operating Authority Flemish Government Department Fleet in cooperation with Flemish Marine Institute (VLIZ) Victorialaan 3 8400 Oostende Tel. 059/34.21.30 Tlfax 059/34.21.31 E-mail : info@vliz.be

4. OWNER BELGIAN STATE REPRESENTED BY MINISTER FOR SCIENCE POLICY

5.	Particulars of ship	Name Nationality Overall length Maximum draught Nett tonnage Propulsion Call Sign	SIMON STEVIN BELGIAN 36 metres 3,5 metres 137 NRT Electric ORBS
6.	Crew	Name of Master No of Crew	Norman Daems 9

7. Scientific Personnel Name and address of applicant :

Dr. David Garcia-Moreno University Gent, Renard Centre for Marine Geology Krijgslaan 281, S8 9000 Gent, Belgium <u>David.GarciaMoreno@UGent.be</u> 8. Geographical area in which ship will operate (with reference in latitude and longitude).



Overview of the study area (black box)

9. Brief description of purpose of cruise

The main goal of this cruise is to study a number of parallel, linear bedforms on the seafloor that were recently discovered in the Dover Strait. The bedforms have a ENE–WSW alignment, are generally up to 30 m wide with amplitudes ranging between 0.5 and 1.2 m, and up to several km long. However, the origin of these bedforms remains highly enigmatic. The recent interpretation is based on 1.5 m bin-size bathymetric data. With this cruise we plan to obtain new geophysical, optical and geological data. This should allow to unravel the mystery regarding the origin of these seafloor features.

10. Port of Call; Dates; Reasons. as proposed by the applicant

None

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

None

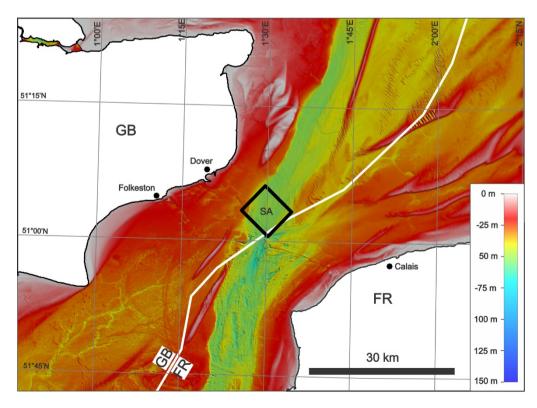
NOTIFICATION OF PROPOSED RESEARCH CRUISE

DETA PART						
1.	Name of research ship	SIMO	N STEVIN	Cruis	e No	16-080
2.	Dates of cruise	From	February 5	То	February	9, 2018

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 main goal of this cruise is to study a number of parallel, linear bedforms on the seafloor that were recently discovered in the Dover Strait. The bedforms have a ENE–WSW alignment, are generally up to 30 m wide with amplitudes ranging between 0.5 and 1.2 m, and up to several km long. However, the origin of these bedforms remains highly enigmatic. The recent interpretation is based on 1.5 m bin-size bathymetric data. With this cruise we plan to obtain new high-resolution multibeam, side-scan sonar and seismic data, as well as optical (video) data and seafloor grab samples. This should allow to unravel the mystery regarding the origin of these seafloor features.

4. Attach chart(s) showing (on an appropriate scale) the geographical area of the intended work: positions of moored equipment. Receivers will mounted on navigation buoys.



Overview of the study area (black box)

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

Geological (Hammond grab, seafloor samples)

6. Details of moored equipment:

DatesLaying Recovery Description Latitude Longitude

- 7. Explosives : None
 - (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 **none**

(b) Any previously published research date relating to the proposed cruise (Attach separate sheet if necessary).

Gupta, S., Collier, J.S., García-Moreno, D., Oggioni, F., Trentesaux, A., Vanneste, K., De Batist, M., Camelbeeck, T., Potter, G., Van Vliet Lanoe, B., and Arthur, J.C.R., 2017. Making Britain: Two-stage catastrophic opening of the Dover Strait. Nature Communications 8, doi: 10.1038/ncomms15101.

9. Names and addresses of scientists of the coastal state in whose waters the proposed cruise takes place with whom previous contact has been made.

Prof. Jenny Collier Dept. Earth Science and Engineering Imperial College London Prince Consort Road London SW7 2BP (United Kingdom) jenny.collier@imperial.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 embarkment / disembarkment.

Yes

(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.

SCIENTIFIC EQUIPMENT

11. Complete the following table naming the coastal state. A separate copy of each state is required. (Indicate "YES" or "NO")

List all major marine scientific equipment, including scientific sonar other than standard navigational echo sounders, it is proposed to use and indicate waters in which it will be deployed	In territorial	On continental shelf
Sparker source and single-channel streamer	YES	YES
Parametric echosounder	YES	YES
Side-scan sonar	YES	YES
Multibeam	YES	YES
Videoframe	YES	YES
Hammond grab sampler	YES	YES
ADCP current profiler	YES	YES