Application for Consent to conduct Marine Scientific Research

Date: 03.07.2017

1. General Information

1.1 Cruise name and/or number: PS110	

1.2 Sponsoring Institution(s):	
Name:	Alfred-Wegener-Institute for Polar- and Marine Research
Address:	Am Handelshafen 12
	27570 Bremerhaven
	Germany
Name of Director:	Prof. Dr. Karin Lochte

1.3 Scientist in charge of the Project:	
Name:	Dr. Rainer Knust
Country:	Germany
Affiliation:	Alfred-Wegener-Institut
Address:	Am Alten Hafen 26, 27568 Bremerhaven,
	Germany
Telephone:	+49-471-4831-1709
Fax:	+49-471-4831-1533
Email:	rainer.knust@awi.de
Website (for CV and photo):	http://www.awi.de

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	Not applicable
Affiliation:	
Address:	
Telephone:	
Fax:	
Email:	
Website (for CV and photo):	

2. Description of Project

2.1 Nature and objectives of the project:

Transfer of vessel from Bremerhaven, Germany to Cape Town before performing expeditions in the Antarctic

The Transit will be used for en route measurements of meteorological and oceanographic data, and tests and calibrations of onboard sensors.

See map attached.

2.2 If designated as part of a larger scale project, then provide the name of the project and the Organisation responsible for coordinating the project:

Not applicable

2.3 Relev	vant previous or future research projects:
Not appl	licable

2.4 Previous publications relating to the project:

Not applicable

3. Geographical Areas

3.1 Indicate geographical areas in which the project is to be conducted (with reference in Latitude and longitude in decimal degrees, including coordinates of cruise/track/way points/sampling stations). Please provide coordinates in a separate excel spreadsheet.

The track through the Engl.Channel will follow the regular traffic ways and traffic separation schemes. All measurements will be done while underway. Therefore, a separate excel-list is not attached, as waypoints may vary due to the traffic situation. Vessels speed will be between 5 to 10,5knots. See also attached maps.

3.2 Attach chart(s) at an appropriate scale (1 page, high-resolution) showing the geographical Areas of the intended work and, as far as practicable, the location and depth of sampling Stations, the tracks of survey lines, and the locations of installations and equipment.

See Attachment I, Maps Only en route measurements.

4. Methods and means to be used

4.1 Particulars of vessel:	
Name:	POLARSTERN
Type/Class:	RV / Icebreaker
Nationality (Flag State):	GERMAN
Identification Number (IMO/Lloyds No.):	8013132
Owner:	Federal Ministry of Education and
	Research, German Government
Operator:	Alfred-Wegener-Institut. Helmholtz-
	Zentrum für Polar- und Meeresforschung
Overall length (meters):	117.91
Maximum draught:	11.21
Displacement/Gross Tonnage:	17,300 t
Propulsion:	2 Propeller, 4 Engines, MDO
Cruising & maximum speed:	12,0kn and 15.5 kn
Call sign:	DBLK
INMARSAT number and method and	Inmarsat
capability	Telephone: 00871 32184 2611 or 2711
of communication (including emergency	Fax: 00871 32184 2612 or 2712
frequencies):	
Name of Master:	Stefan Schwarze
Number of Crew:	43
Number of Scientists on board:	5

4.2 Particulars of Aircraft:	
Name:	Not applicable
Make/Model:	
Nationality (flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall Length (meters):	
Propulsion:	
Cruising & Maximum speed:	
Registration No.:	

Call Sign:	
Method and capability of communication	
(including emergency frequencies):	
Name of Pilot:	
Number of crew:	
Number of scientists on board:	
Details of sensor packages:	
Other relevant information:	

4.3 Particulars of Autonomous Underwater Vehicle (AUV):	
Name:	Not applicable
Manufacturer and make/model:	
Nationality (Flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall length (meters):	
Displacement/Gross tonnage:	
Cruising & Maximum speed:	
Range/Endurance:	
Method and capability of communication	
(including emergency frequencies):	
Details of sensor packages:	
Other relevant information:	

4.4 other craft in the project, including its use: Not applicable

4.5 Particulars of methods, full description of scientific instruments to be used(for fishing gear specify type and dimension) and location			
Types of samples and Measurements:	Methods to be used:	Instruments to be used:	To be carried out within 12nm (yes or no):
Meteorological		Miscl. e.g cloud	yes
measurements		camera	
Air sampling		DOAS, pCO2, thermosalinograph, distrometer, watervapouranalyzer	yes
Water sampling	pCO2, temperature, salinity	Ferrybox, Temp. / salinity sensors, particlefilter, SVP/T	yes
Endotherme Observation	Visual, IR-camera	IR-Camera	yes
Gravity		Gravimeter	yes
Magnetometry		Fluxgate Magnetometer	yes
Sea currents	hydro-acoustics	ADCP	yes
Wave measurement	Radar	WAMOS wave radar	yes
Cosmic ray		Myon detector and neutron detector	yes

4.6 Indicate nature and quantity	of substances to be released into the marine environment:
None	

4.7 Indicate whether drilling will be carried out. If yes, please specify:

None

4.8 Indicate whether explosives will be used. If yes, please specify type and trade name, Chemical content, depth of trade class and stowage, size, depth of detonation, frequency of Detonation, and position in latitude and longitude:

No

5. Installations and Equipment

Details of installations and equipment (including dates of laying, servicing, method and Anticipated timeframe for recover, as far as possible exact locations and depth, and Measurements):

Not applicable

6. Dates

6.1 Expected dates of first entry into and final departure from the research area by the research vessel and/or other platforms:

Expected transit through the English channel: 21.12.2017 to 24.12.2017

6.2 Indicate if multiple entries are expected:

Not applicable

7. Port Calls

7.1 Dates and Names of intended ports of call:

Departure: Bremerhaven 20. Dez. 2017
Portcall: Las Palmas 28. Dez. 2017
Arrival: Cape Town 15. Jan. 2018
Departure: Cape Town 19. Jan. 2018

7.2 Any special logistical requirements at ports of call:

Not applicable

7.3 Name/Address/Telephone of shipping agent (if available):

Not applicable

- 8. Participation of the representative of the coastal State
- 8.1 Modalities of the participation of the representative of the coastal State in the research Project:

Participation possible but not planned. Contact: Schiffskoord@awi.de

8.2 Proposed dates and ports for embarkation/disembarkation:

Bremerhaven (Germany) / Las Palmas (Spain): 20.12./ 28.12.2017

- 9. Access to Data, Samples and Research Results
- 9.1 Expected dates of submission to coastal State of preliminary report, which should include The expected dates of submission of the data and research results:

6 months after the end of the cruise

9.2 Anticipated dates of submission to the coastal State of the final report:

12 months after the end of the cruise

9.3 Proposed means for access by coastal State to data (including format) and samples:

Via Internet, through the Pangaea database accessible at http://www.pangaea.de/

9.4 Proposed means to provide coastal State with assessment of data, samples and Research results:

Results are published in the Reports of Polar Research by AWI and in other reports, papers and in international scientific journals.

Via Internet:http://www.pangaea.de/

https://www.pangaea.de/expeditions/cr.php/Polarstern

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples And research results:

Data including documentation and contact details of the responsible scientists are available through the Pangaea database accessible at http://www.pangaea.de

9.6 Proposed means of making results internationally available:

Results are published in the Reports of Polar Research by AWI and in other reports, papers and in international scientific journals.

10. Other permits Submitted

10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):

Similar notification to all coastal states en route

11. List of Supporting Documentation

- 11.1 List of attachments, such as additional forms required by the coastal State, etc.:
 - Attachment I/II: Maps

On behalf of the chief scientist:

Signature:

03.07.2017

Contact information of the focal point:

Name: Marius Hirsekorn

Country: Germany

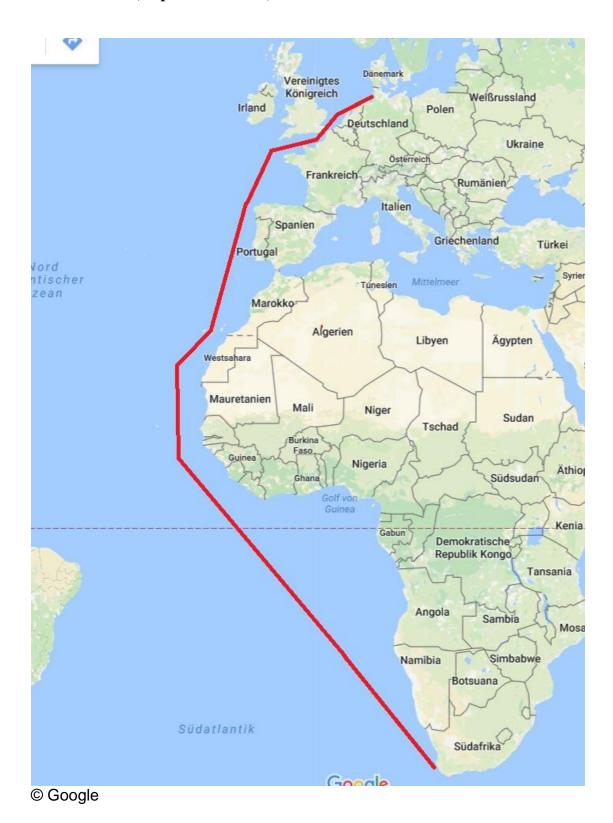
Affiliation: Alfred Wegner Institute

Alfred-Wegener-Institut
Helmholtz-Zentrum für
Polar- und Meeresforschung
Logistik und Forschungsplattformen
Am Alten Hafen 26
27568 Bremerhaven

Telephone: +49-(0)471-4831-2241

Email: Schiffskoord@awi.de Address: Am Alten Hafen 26

Attachment I. (map of total cruise)



Attachment II. (map of cruise section Las Palmas-Bremerhaven)



No specific research area in the Engl.Channel. Measurements to be done "en route" and underway following the regular traffic ways and separation schemes. \rightarrow therefore no separate Excel – sheet with research area coordinates.