## Application for Consent to conduct Marine Scientific Research

Date: 10.04.2014

# 1. General Information

1.1 Cruise name and/or number: PS88A (ANT-XXX/1)

| 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:                                    | +49-471-4831-1849                     |
| Email:                                  | rainer.knust@awi.de                   |
| Website (for CV and photo):             | http://www.awi.de/People/show?rknust  |

| 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:

First Part of the transit from Germany to Cape Town for the following Antarctic expeditions 2014/15.

The first part will start in Bremerhaven, via Le Havre (France) to Las Palmas (Canary Islands). The transect will be used for en route measurements, a training programme for students and to calibrate hydro-acoustic sensors. The first part of the transit will end in Las Palmas, 03.11.2014. 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 Relevant previous or future research projects: **Not applicable** 

2.4 Previous publications relating to the project:

All cruise reports with detailed station lists are published in the series "Reports on Polar Research" by Alfred-Wegener-Institute for Polar-und Marine Research, Bremerhaven.

# 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.

Transfer of vessel from Bremerhaven, Germany to Cape Town, South Africa, via Le Havre, France and Las Palmas, Spain for the start of the following expeditions in the Antarctic.

The cruise will be split in to two parts:

PS88A : Bremerhaven, Germany - Le Havre, France - Las Palmas, Spain PS88B : Las Palmas, Spain - Cape Town, South Africa.

The Transit from Bremerhaven to Las Palmas will be used for en route measurements of meteorological and oceanographic data, for a training programme for students (sediment measurements (multibeam with hydrosweep / parasound) and tests and calibrations of on board sensors. These measurements are only "en Route" measurements, exactly positions are not possible in the moment (will be given in the cruise track in cruise report).

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.

| 4.1 Particulars of vessel:              |   |
|---|---|
| Name:                                   | POLARSTERN                              |
| Type/Class:                             | RV / Icebreaker                         |
| Nationality (Flag State):               | GERMAN                                  |
| Identification Number (IMO/Lloyds No.): |   |
| Owner:                                  | Federal Ministry of Education and       |
|   | Research, German Government             |
| Operator:                               | Alfred-Wegener-Institute for Polar- and |
|   | Marine Research                         |
| 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:                         | T.Wunderlich                            |
| Number of Crew:                         | 42                                      |
| Number of Scientists on board:          | 35                                      |

# 4. Methods and means to be used

| 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): |  |
|---|--|
| Not applicable  |  |
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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 Methods to be used: Instruments to be To be carried out Measurements: used: within 12nm (yes or no): Meteorological Miscl. yes measurements DOAS, pCO2 Air sampling Neutron detection yes & cosmic particles, pCO2 Water sampling pCO2, temperature, Ferrybox, yes salinity Temp. / salinity sensors hydro-acoustics Hydrosweep DSIII Sea bottom yes topography Sea currents hydro-acoustics ADCP yes Sediment hydro-acoustics Parasound DSyes measurements hydro-acoustics, Water **EK60** YES multi frequency measurements

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:

Not applicable due to en route measurements. Vessel will be on transit from Bremerhaven to Las Palmas. Route will follow regular vessel traffic separation schemes. Measurements will be done underway. Expected transit through the English channel: 25.10.2014 / 29.10.014

Port : Le Havre (France) 26-27.10.2014.

6.2 Indicate if multiple entries are expected:

2. entry after port Le Havre (27.10.2014)

# 7. Port Calls

| 7.1 Dates and Names of intended ports of call: |
|--|
| Bremerhaven (Germany) : 24.10.2014 departure   |
| Le Havre (France) : 26. – 27.10.2014           |
| Las Palmas (Spain) : 03. – 03.11.2014          |
| Cape Town (South Africa): 29.11.2014           |

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:

Not applicable

8.2 Proposed dates and ports for embarkation/disembarkation: **Not applicable** 

## 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.

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 BRV - CPT

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:
Attachment I: Map

On behalf of the chief scientist:

Signature:

M. Hrush

10.04.2014

Contact information of the focal point:Name:Marius HirsekornCountry:GermanyAffiliation:Alfred Wegner Institute

Stiftung Alfred-Wegener-Institut für Polar- und Meeresforschung in der Helmholtz-Gemeinschaft Am Handelshafen 12 27570 Bremerhaven

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