

NOTIFICATION OF PROPOSED RESEARCH CRUISEGENERAL  
PART A

1. Name of ship **FS 'HEINCKE'**
2. Dates of cruise from June 26th. 2011 to July 9th. 2011
3. Operating Authority **Alfred-Wegener-Institute for Polar- und Marine Research**  
in the Helmholtz-Association  
Am Handelshafen 12  
27570 Bremerhaven  
Telephone +49 (0) 471-4831-2241  
Telefax +49 (0) 471-4831-1355  
E-mail: [Schiffskoord@awi.de](mailto:Schiffskoord@awi.de)
4. Owner(if different from para 3) Federal Ministry of Education and Research  
German Government
5. Particulars of ship:
- |                 |  |
|-----------------|--|
| Name            | <b>HEINCKE</b>   |
| Nationality     | German   |
| Overall length  | 55,20 metres   |
| Maximal draught | 3,95 metres  |
| BRT             | 1000   |
| Propulsion      | Diesel Electric  |
| Call Sign       | DBCK   |
| IMO no.         | 8806113  |
| MMSI no.        | 211216570  |
| Telephone       | INMARSAT +870-764-140-491                                      |
|                 | IRIDIUM +881-631-815-155                                       |
| Telefax         | INMARSAT +870-764-140-493                                      |
| e-mail          | <a href="mailto:Heincke-f@skyfile.de">Heincke-f@skyfile.de</a> |
6. Crew
- |                |      |
|----------------|------|
| Name of Master | Voss |
| No of Crew     | 11   |
7. Scientific Personnel
- Scientist in charge
- Dr. Klaus von Bröckel  
Leibniz Instiut für Meereswissenschaften IFM-GEOMAR  
TLZ  
Wischhofstr. 1-3  
24148 Kiel  
Phone : +49 431 600 4259  
Fax : +49 431 600 134257  
e-mail : [kvonbroeckel@ifm-geomar.de](mailto:kvonbroeckel@ifm-geomar.de)  
No of Scientists : 10
8. Geographical area in which ship will operate (with reference to latitude and longitude)  
Raunefjord, Bergen, 60,31° N, 5,16° E
9. Brief description of purpose of cruise:  
Recovery of moored equipment ("mesocosms")
10. Dates and names of intended ports of call  
Bergen, Norway, several times between June 30. and July 5. 2011
11. Any special logistic requirement at ports of call: none



7. Explosives: none
  - (a) Type and Trade Name
  - (b) Chemical content
  - (c) Depth of Trade class and stowage
  - (d) Size
  - (e) Depth of detonation
  - (f) Frequency of detonation
  - (g) Position in latitude and longitude
  - (h) Dates of detonation
  
8. Detail and reference of
  - (a) Any relevant previous/future cruises  
HE 273 (2007) and HE 290 (2008)
  
  - (b) Any previously published research data relating to the proposed cruise. (Attach separate sheet if necessary)  
see attached sheet II.
  
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. Tron Frede Thingstad  
Universitetet i Bergen  
Thormøhlensgt. 53 A/B  
Postboks 7800  
5020 BERGEN / Norway  
E-mail: Frede.Thingstad@bio.uib.no  
Telephone: (+47) 55582683

Dr. Richard Bellerby  
Bjerknes Centre for Climate Research,  
University of Bergen,  
Allégaten 55,  
N-5007 Bergen, Norway.  
Tel: +47 55 582565, Fax: +47 55 584330,  
Email: Richard.Bellerby@bjerknes.uib.no

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 Bergen, Norway, July 1. to 3. 2011
  
  - (c) When research data from the intended cruise is likely to be made available to the coastal state and if so by what means.  
scientific publications in peer-review journals, 2011 to 2013

SCIENTIFIC EQUIPMENT

COASTAL STATE : NORWAY

11. Complete the following table - SEPARATE COPY FOR EACH COASTAL STATE  
(INDICATE 'YES' OR 'NO' )

List of all major Marine Scientific Equipment it is proposed to use and indicate waters in which it will be deployed.	Fisheries Research Within Fishing Limits	Research concerning Continental Shelf out to coastal state's margin	DISTANCE FROM COAST			
			Within 3 NM	Between 3 - 12 NM	Between 12 - 50 NM	Between 50 - 200 NM
	no	no	no	no	no	no
	no	no	no	no	no	no
RECOVERY OF ALREADY MOORED EQUIPMENT MESOCOSM ONLY	no	no	yes	no	no	no

(On behalf of the Principal Scientist)

*Marius Amel*  
08.11.2010

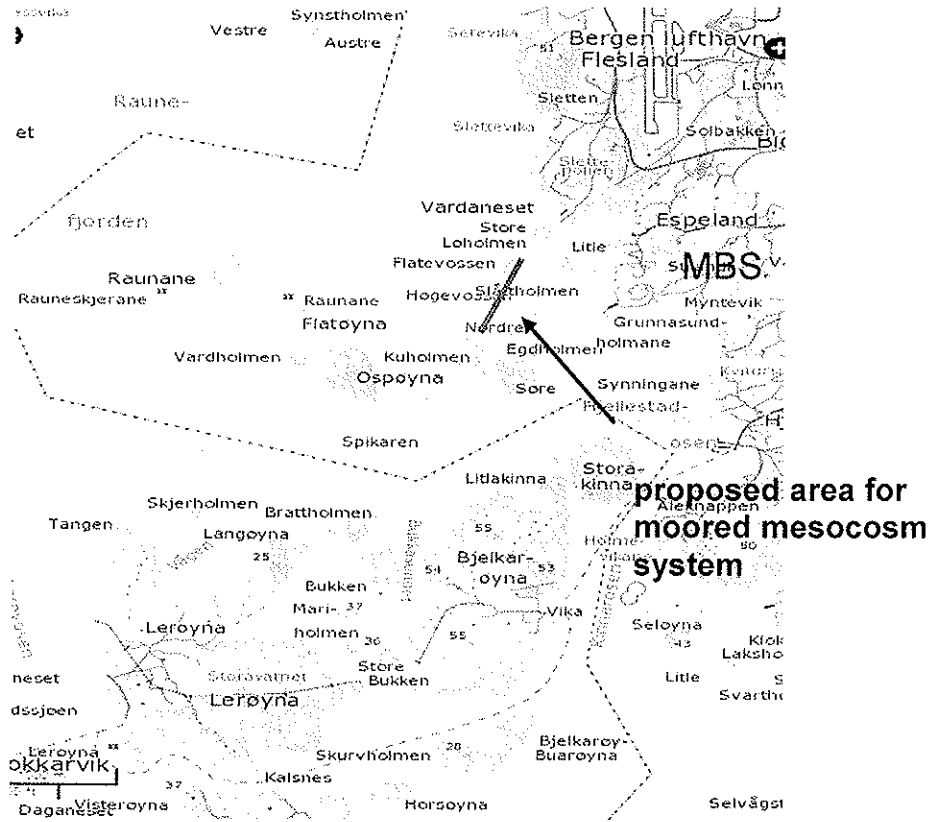
Operating Authority:

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

N.B. IF ANY DETAILS ARE MATERIALLY CHANGED REGARDING DATES / AREA OF OPERATION AFTER THIS FORM HAS BEEN SUBMITTED THE COASTAL STATE'S AUTHORITIES MUST BE NOTIFIED IMMEDIATELY.

Area of proposed mesocosm system - the RV HEINCKE will collect the system after experiments have been carried out.

(Detailed map of research area of the respective country)



## ATTACHMENT II

Publications from earlier mesocosms studies:

Engel, A. et al.; Production and fate of DOM during a CO<sub>2</sub>-Mesocosm study (2009), 3rd Annual SOPRAN Meeting, ZMAW, Hamburg, 23/24 March 2010

Glockzin, M. et al.: Sedimentation under altered environmental conditions - sediment trap results from 2009 SOPRAN Baltic offshore mesocosm experiment. 3rd Annual SOPRAN Meeting, ZMAW, Hamburg, 23/24 March 2010

Schulz, K. et al.: The 2009 mesocosm CO<sub>2</sub> perturbation experiment in Boknis Eck: First results. 3rd Annual SOPRAN Meeting, ZMAW, Hamburg, 23/24 March 2010

Glockzin, M. and F. Pollehne: Sizing particles - methods and results from the 2008 SOPRAN Baltic offshore mesocosm experiment and affiliated works. 2nd Annual SOPRAN Meeting, IFM-GEOMAR, Kiel, 19/20 March 2009

Idendee, K. et al.: Diurnal patterns of autotrophic and heterotrophic processes during a summer phytoplankton bloom in the Baltic Sea - results from Heincke 290 cruise. 2nd Annual SOPRAN Meeting, IFM-GEOMAR, Kiel, 19/20 March 2009

Johansen, H. et al.: Diversity and *nifH* gene expression of diazotrophic cyanobacteria during a diel cycle in the Baltic Sea. 2nd Annual SOPRAN Meeting, IFM-GEOMAR, Kiel, 19/20 March 2009

Lunau, M. et al.: Interplay between microbial dynamics and TEP under elevated pCO<sub>2</sub> - results from a mesocosm study in the Baltic. 2nd Annual SOPRAN Meeting, IFM-GEOMAR, Kiel, 19/20 March 2009