NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL

Part A

01.	Name of research ship:	***M E T E O R***	Cruise No. **M 87/1**
02.	Dates of cruise	from **Lisbon 19. March 2012** to **Reykjavik 02. May 2012**	
03.	Operating Authority	***Institut für Meereskunde / University of Hamburg Bundesstr. 53, D-20146 Hamburg, Germany Tel.: +49-40-42838-3974 - Fax: +49-40-42838-46 44***	
04.	Owner (if different from para 3)	***Federal Ministry of Education and Research***	
05.	Particulars of ship:	Name	***METEOR***
		Nationality	***German***
		Overall length	***97,5 metres***
		Maximum draught	***5,6 metres***
		Nett tonnage	***1284.0 NRT***
		Propulsion	***Diesel Electric***
		Call sign	***D B B H***
06.	Crew	Name of master	**Schwarze/Schneider**
		No. of crew	***max. 34***
07.	Scientific personnel:	Name and address of scientist in charge	**Jan Backhaus** **ZMAW** **Bundesstraße 53** **20146 Hamburg**
		Tel./Fax/Telex No.	**040 42838 2604 / 7485**
		No. of scientists	***max.30***
08.	Geographical areas in which ship will operate (with reference in latitude and longitude)		**North Atlantic between 60-65 °N and 002 °E - 012 °W**

09. Brief description of purpose of cruise

The cruise will be conducted within the European Union research project BASIN "Basin-scale Analysis, Synthesis, and Integration". The cruise will focus on physical controls on the dynamics of phytoplankton biomass, carbon flux and zooplankton interactions in the North Atlantic during the transition from regimes of winter convection to spring stratification.

10. Dates and names of intended ports of call **None**

11. Any special logistic requirements at ports of call **None**

DETAIL

Part B

01. Name of research ship Meteor Cruise No. **M 87/1**

02. Dates of cruise from: **Lisbon 19. March 2012**_to **Reykjavik 02. May 2012**

03. Purpose of research and general operational methods

The cruise will be conducted within the European Union research project BASIN "Basin-scale Analysis, Synthesis, and Integration". The cruise will focus on physical controls on the dynamics of phytoplankton biomass, carbon flux and zooplankton interactions in the North Atlantic during the transition from regimes of winter convection to spring stratification.

The following topics will be investigated:

- **The biomass and fate of phytoplankton cells entrained in winter convective cells**
- **The depth of diapause of *Calanus finmarchicus* in relation to deep convection**
- **Timing of the response of large phytoplankton biomass and composition to stratification in different hydrographic regimes in the North Atlantic.**
- **The size structure and taxonomic composition of plankton and particles in relation to the transition period from winter convection to spring stratification and subsequent response of the zooplankton community and particle aggregation.**
- **The vertical distribution taxonomy and size structure of phytoplankton, zooplankton, and particles over the transition from the winter convective regime to the spring bloom regime**
- **Individual interactions between zooplankton consumers and sinking particles, with respect to encounter and feeding rates and residence times of the key zooplankton species on different types of aggregates over the transition from convective regime to spring bloom.**
- **Identify the key predators consuming C. finmarchicus during diapause and ascent to the surface mixed layer.**

04. Attach chart showing (on an appropriate scale) the geographical area of the intended work, positions of intended statons, tracks of survey lines, positions of moored / seabed equipment.

see attachment

05. Types of samples required, e.g. Geological / Water / Plankton / Fish / Radio-activity / Isotope

Water, Particles, Phytoplankton, Zooplankton, Underwater microscopic video images from zooplankton organisms

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

- Remotely Operated Vehicle for *in-situ* microscopic observations of plankton
- Video Plankton Recorder (VPR), continuous transect undulating tows
- Multiple Plankton nets (differents sizes)
- CTD & water bottle sampler, vertical profiles
- ADCP (Acoustic doppler current profiler) continuous transects
- Drifter

06. Details of moored equipment: **None**

07. Explosives: ***no explosives***

(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) Position in latitude and longitude

(h) Dates of detonation

08. Detail and reference of

(a) Any relevant previous / future cruises

No previous cruises. Next cruise in spring 2013

(b) Any previous published research data relating to the porposed cruise. (Attach separate sheet if necessary.)

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

Richard Sanders
National Oceanography Centre, Southampton
University of Southampton Waterfront Campus
European Way
Southampton SO14 3ZH
Great Britain

10. State:

(a) Whether visitis 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, after discussion
19.03.12 Lisbon, 06.04.2012 Torshavn, 02.05.2012 Reykjavik

(c) When research data from intended cruise is likely to be made available to the coastal state and if so by what means.

- *Cruise Report* three months after finishing the research cruise

- ***Scientific publication* within the following three years**

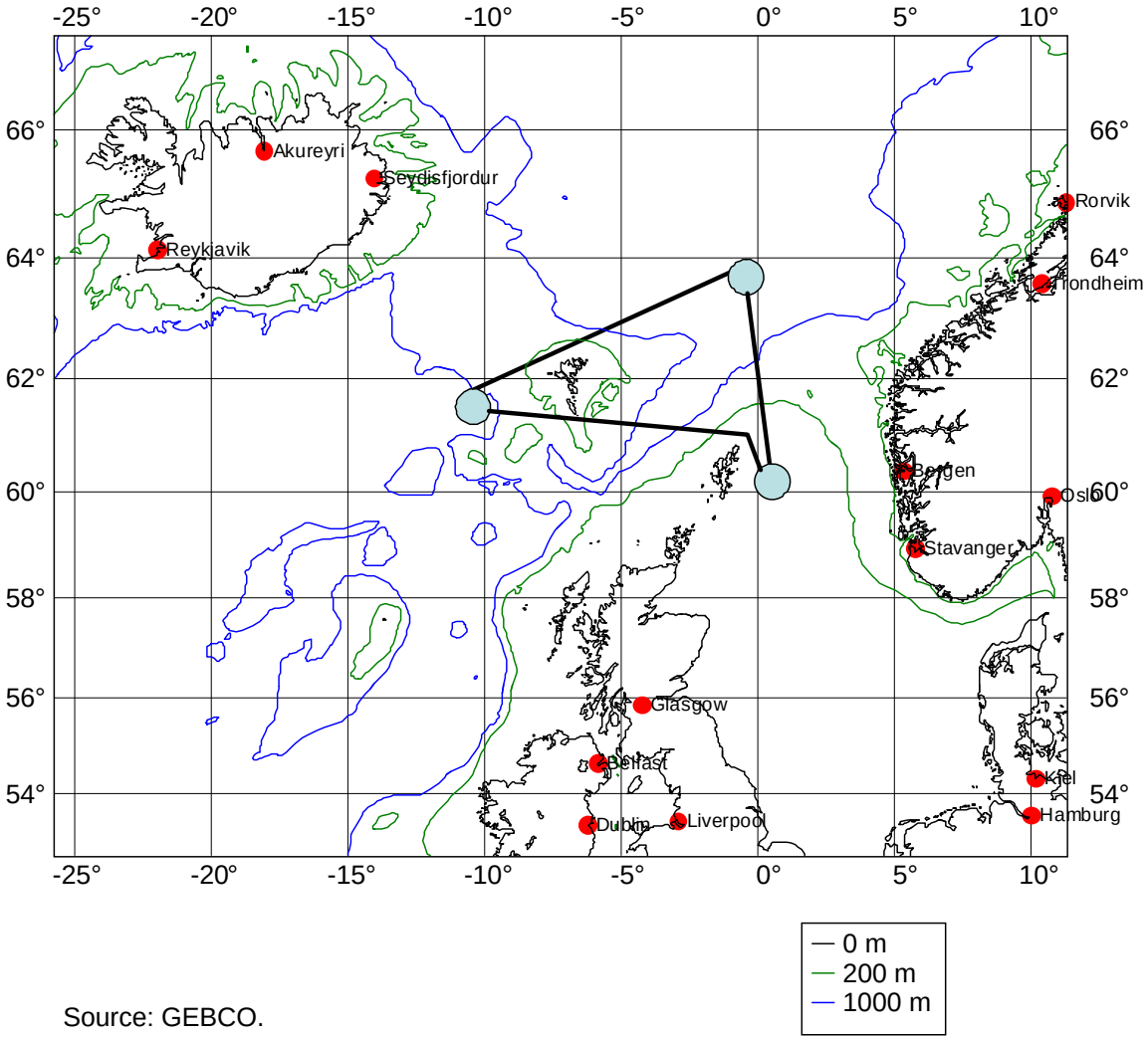
COASTAL STATE: Great Britain

SCIENTIFIC EQUIPMENT

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	Within 3 NM	Between 3 - 12 NM	Between 12 - 50 NM	Between 50 - 200 NM
a) vessel mounted systems: hydroacustic mapping / measuring (incl. ADCP, Parasound and Simrad Swathsounder)	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**
permanent surface water sampling / pumping (incl. Thermosalinograph)	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**
b) mobile equipment:						
Plankton nets	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**
CTD	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**
Remotely Operated Vehichle (ROV)	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**
Video Plankton Recorder (VPR)	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**
Drifter	**No**	**Yes**	**No**	**No**	**Yes**	**Yes**



Source: GEBCO.

Stations (blue) and transects during the research cruise