NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL
Part A

01. Name of research ship M/V FRANKLIN **Cruise No**. BGR 07

02. Dates of cruises **leg1 + leg2 from** 23. 06. 2007 **to** 28. 07. 2007

03. Operating Authority Federal Institute for Geosciences and Natural Resources (BGR), Stilleweg 2, 30655 Hannover, Germany
Telephone: +49-511-643-2786 (Dr. L. Reinhardt)
Fax: +49-511-3663

04. Owner (if different from para 3) Marin Mätteknik AB
Nya Varvet, Building 84
S-426 71 Västra Frölunda, Sweden
Telephone: +46-31-695280

05. Particularities of ship:

Name	M/V FRANKLIN	
Nationality	Swedish	
Overall length	55	**metres**
Maximum draught	6	**metres**
Nett tonnage	353	**NRZ**
Propulsion	Diesel	
Call sign	SEIN	

06. Crew **Name of master** Captain Martin Backman or Captain Lars Olofsson

No. of crew max. 14

07. Scientific personnel:

Name and address of scientist in charge	Dr. L. Reinhardt (Leg2) Dr. Sönke Neben (Leg1) Federal Institute for Geosciences and Natural Resources (BGR), Stilleweg 2, 30655 Hannover, Germany
Tel./Fax/Telex No.	+49-511-643-2786/3663/-
No. of scientists	max. 12

08. Geographical area in which ship will operate (with reference in latitude and longitude):

Nr.	Lat	Lon	remarks	7	53.4700000	3.0166667	13
1	55.7650000	3.3702778	E8	8	53.5850000	2.9883333	14
2	55.8350000	3.4000000	D	9	53.6683333	2.9566667	15
3	55.9192778	3.3500000	S7	10	53.9633333	2.8666667	16
4	56.0866667	3.2500000		11	54.3800000	2.7633333	17
5	55.0000000	1.0000000		12	54.6216667	2.8983333	18
6	54.0000000	1.0000000		13	55.7650000	3.3702778	19/E8

09.Brief description of purpose of cruise:

The legs aim mainly on the EEZ of Germany with focus on the “tail end”. Leg1: high-resolution multi-channel seismic survey with focus on the shallow subsurface (Tertiary delta deposits and Pleistocene valleys). Leg2: geological seabed sampling at selected sites by vibration corer, multicorer, and gravity corer for age dating, sediment properties, etc.

10.Dates and names of intended ports of call

Bremerhaven:	23. 06. 2007 (start)
Heligoland:	if weather conditions are unfavourable
Bremerhaven:	10./11. 07. 2007 harbour: change of equipment (leg1 /leg2)
Bremerhaven:	28. 07. 2007 (ending)

11. Any special logistic requirements at ports of call: none

DETAIL

Part B

1. **Name of Research ship** M/V FRANKLIN **Cruise No.** BGR 07

2. **Dates of cruise** **from:** Bremerhaven 23. 06. 2007 **to:** Bremerhaven 28. 07. 2007

3. **Purpose of research and general operational methods**
   Main objective of this operation is the survey of the shallow subsurface of the EEZ of Germany with a focus on the "tail end" by means of multi-channel seismic complemented by high-resolution methods (Boomer, Sparker, CHIRP systems). This is done to map Quaternary and Tertiary deposits (subglacial valleys, delta deposits). In this context we intend to connect existing seismic profiles to the German sector. Sediment sampling is intended mainly for the German EEZ, only if sediment echosounder lines measured during the cruise should indicate suitable sampling locations in English waters permission for sampling is asked herewith.

4. **Attached charts showing (on an appropriate scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment.**

   See attached map (Figure 1). Details of tracks of survey lines will be discussed with BGS (Dan Evans, Edinburgh) to connect existing surveys to the German sector. Sampling locations will be determined from sediment echosounder lines obtained during cruise.

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

   seismic/hydroacoustic data, geological samples

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

   hydroacoustic measuring (multichannel seismic, sediment echosounders)

   coring: vibration coring (6 m max. penetration), gravity coring (5 m max. penetration), and multicoring (0,5 m max. penetration)

   rosette water multisampler

6. **Details of moored equipment:** none

Dates				
Laying	**Recovery**	**Description**	**Latitude**	**Longitude**

7. **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**

8. **Detail and reference of**

   (a) Any relevant previous/future cruises

   EU Southern North Sea Project 1989-1992 (FS GAUSS 1987 + 1990)
   BGR cruises with MV AURELIA BGR03-AUR (2003), BGR04-AUR (2004, Leg 1+2)
   BGR cruises with RV HEINCKE HE 242 (2005, Leg 1+2)
   BGR cruise with RV ALKOR AL 278 (2006)

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

Cameron, T.D.J., Bulat, J. and Mesdag, C.S. 1993. High resolution seismic profile through a Late Cenozoic delta complex in the southern North Sea. Marine and Petroleum Geology, 10: 591-599.
Cameron, T.D.J., Stoker, M.S. and Long, D. 1987. The history of Quaternary sedimentation in the UK-Sector of the North Sea Basin. J. Geol. Soc., London, 144: 53-58.
Cameron, T.D.J., van Doorn, D., Laban, C. and Streif, H. 1993. Geology of the Southern North Sea Basin. In: Coastlines of the Southern North Sea (Eds R. Hoellen and H.J. Verhagen), pp. 14-26. American Society of Civil Engineers, New York.
Huuse, M. and Lykke-Andersen, H. 2000, Overdeepend Quaternary valleys in the eastern Dansih North Sea: morphology and origin. Quaternary Science Reviews, 19: 1233-1253.
Huuse, M., Lykke-Andersen, H. and Michelsen, O. 2001, Cenozoic evolution of the eastern Dansih North Sea. Marine Geology, 177: 243-269.
AUR, MV AURELIA (16. 09. - 09. 10. 2003), BGR, Hannover.
Kudrass, H.-R., Wiedicke-Hombach, M. and shipboard-scientific-party 2004. Fahrtbericht/Cruise Report: Nordsee, BGR04-AUR, MV AURELIA, Leg2 (09. 09. - 02. 10. 2004), BGR, Hannover.
Neben, S. and shipboard-scientific-party 2004. Fahrtbericht/Cruise Report: Nordsee, BGR04-AUR, MV AURELIA, Leg1 (30. 05. - 19. 06. 2004), BGR, Hannover.
Neben, S. and shipboard-scientific party 2006, Fahrtbericht/Cruise Report: RV Heincke cruise HE242 Leg1 Nordsee (17.10. – 31.10. 2005), BGR Hannover.
Reinhardt, L.. and shipboard-scientific party 2006, Fahrtbericht/Cruise Report: RV Heincke cruise HE242 Leg2 Nordsee (01.11. – 14.11. 2005), BGR Hannover.

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**

Dan Evans
British Geological Survey, Murchison House,
West Mains Road, Edinburgh EH9 3LA, UK.

Mads Huuse,
3D Lab School of Earth, Cardiff University
Park place, Cardiff CF10 3YE, Wales, UK.

10. State:

a.) Whether visits to the ship in port be 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: generally yes, but at the present state all places are taken by functional personal necessary to run the various seismic systems/sampling equipment due to the restriction on 12 scientists on M/V FRANKLIN.

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. Digital data sets of seismic lines. Scientific publication within the following three years.

COASTAL STATE: United Kingdom

SCIENTIFIC EQUIPMENT

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

			DISTANCE FROM COAST			
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:						
Hydroacoustic mapping/measuring (incl. ADCP, Parasound, multibeam)	No	Yes	No	No	Yes	Yes
Permanent surface water sampling / pumping (incl. Thermosalinograph)	No	Yes	No	No	Yes	Yes
b) mobile acoustic equipment: multichannel seismic sidescan-sonar Boomer/Sparker	No	Yes	No	No	Yes	Yes
c) mobile coring equipment incl. vibration, piston, box, multicorer	No	Yes	No	No	Yes	Yes

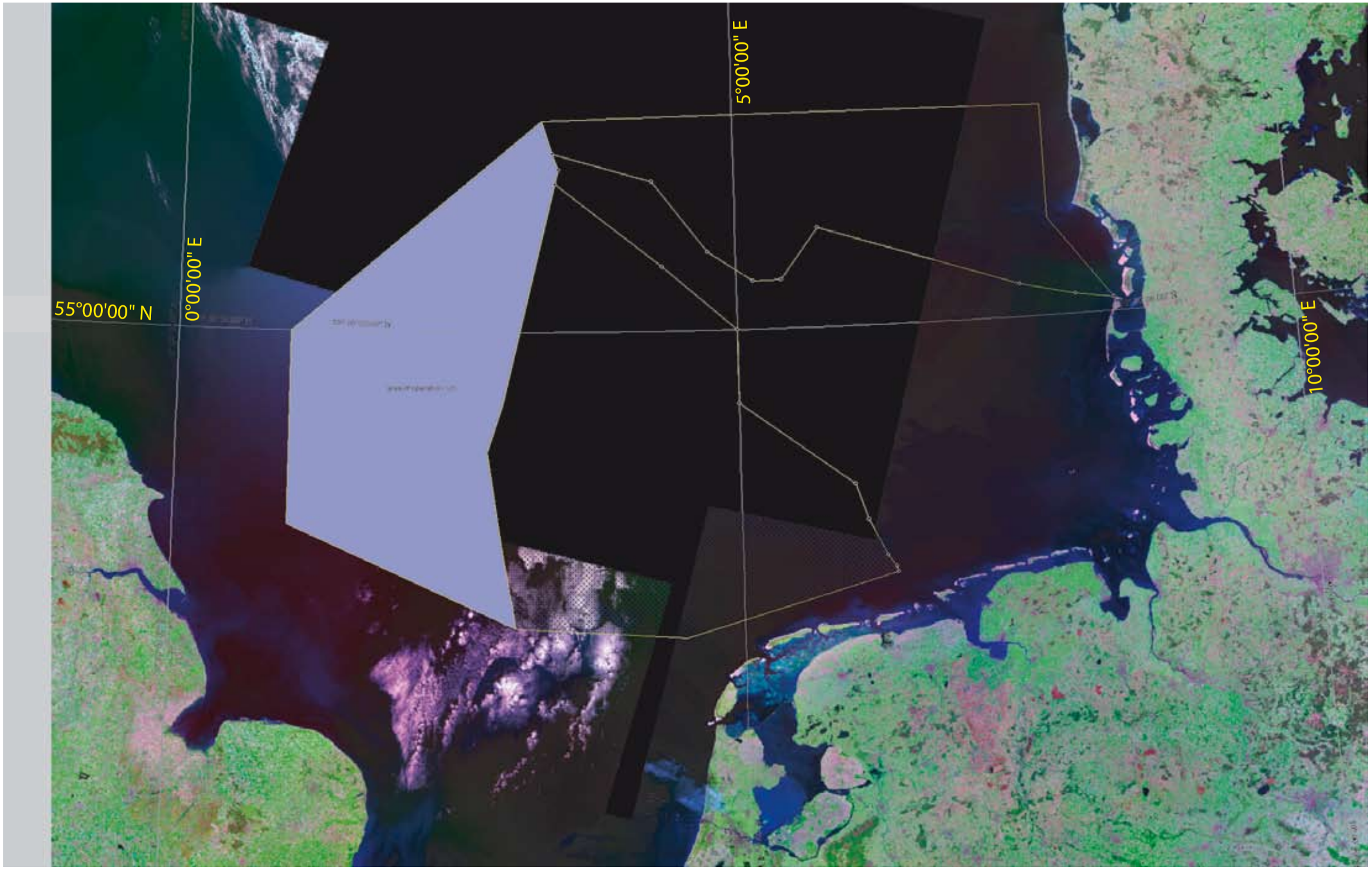

Figure 1: Chart showing the geographical area of intended work within British EEZ.
Yellow lines frame the limits of areas of operation in the EEZ's of Denmark, The Netherlands, and Germany.