NATURAL ENVIRONMENT RESEARCH COUNCIL

APPLICATION FOR CONSENT TO CONDUCT MARINE SCIENTIFIC RESEARCH IN AREAS UNDER NATIONAL JURISDICTION OF **ICELAND**

Date: 24th March 2006

1. *General information*

1.1 Cruise name and/or number: RRS DISCOVERY (D312)

1.2 Sponsoring institution:
Name: National Oceanography Centre
Address: Empress Dock, Southampton. Hampshire. SO14 3ZH.
Name of director: Professor Ed Hill

1.3 Scientist in charge of the project:
Name: Dr. John Allen, NOCS

1.4 Scientist(s) from ICELAND informed of the planning of the project
Name(s):
Address:

1.5 Submitting officer:
Name and address: AR Louch, NERC Research Ship Unit, Southampton Oceanography Centre, European Way, Empress Dock,
Southampton, S14 3ZH
Telephone: +44 2380 596800
Telex: 47121 Telefax: +44 2380 635130

2. *Description of project (Attach additional pages as necessary)*

Information is available on both the NOCS & SAMS websites.

2.1 Nature of objectives of the project:
To conduct a hydrographic (Physical, Biological & chemical) survey along the Extended Ellett Line between Scotland and Iceland.

2.2 Relevant previous or future research cruises:
RV Poseidon 2004.
Cruise report available on request.

2.3 Previously published research data relating to the project:
Previous cruise data has been banked with The British Oceanographic Data Centre (www.bodc.ac.uk)

3. *Methods and means to be used*

3.1 Particulars of vessel

Name: RRS DISCOVERY
Nationality: BRITISH
Owner: NERC
Operator: RSU
Overall length: 90.25 metres
Maximum draught: 5.3 metres
Net tonnage: 902 Gross tonnage: 3008
Propulsion: Diesel Electric
Cruising speed: 11 knots Maximum speed: N/A
Call sign: GLNE
Method and capability of communication (including telex, frequencies):
Inmarsat Voice: 323388210 Fax: 23388212 Telex:323388314
Name of master: To be advised
Number of crew: 22
Number of scientists on board: 28

3.2 Aircraft or other craft to be used in the project: None

3.3 Particulars of methods and scientific instruments

Types of samples and data	Methods to be used	Instruments to be used
Water Column Measurements	lowered profiling CTD package. Small 200 micron plankton net deployed to a depth of 100 m at a small number of CTD stations	SBE CTD & water bottle rosette Plankton net
Underway Sampling	Meteorology, sea surface temperature, salinity, fluorescence and turbidity Water currents Water depth	Wind speed, pressure, air temperature etc. Thermosalinograph, Fluorometer, transmissometer Vessel mounted ADCP Echo-sounder
Mooring deployments at 60 degrees N, 20 degrees W	Four moorings in an ~ 30 km square, one sediment trap and one current meter on each at ~ 750 m above the sea-bed	Sediment traps, current meters

3.4 Indicate whether harmful substances will be used:

Small quantities of laboratory reagents will be used **within the laboratories aboard the ship**, these include formaldehyde and dilute acids. All waste products will be disposed of on return to the UK.

3.5 Indicate whether drilling will be carried out: No

3.6 Indicate whether explosives will be used: No

4. *Installations and equipment*

Details of installations and equipment (dates of laying, servicing, recovery; exact locations and depth):

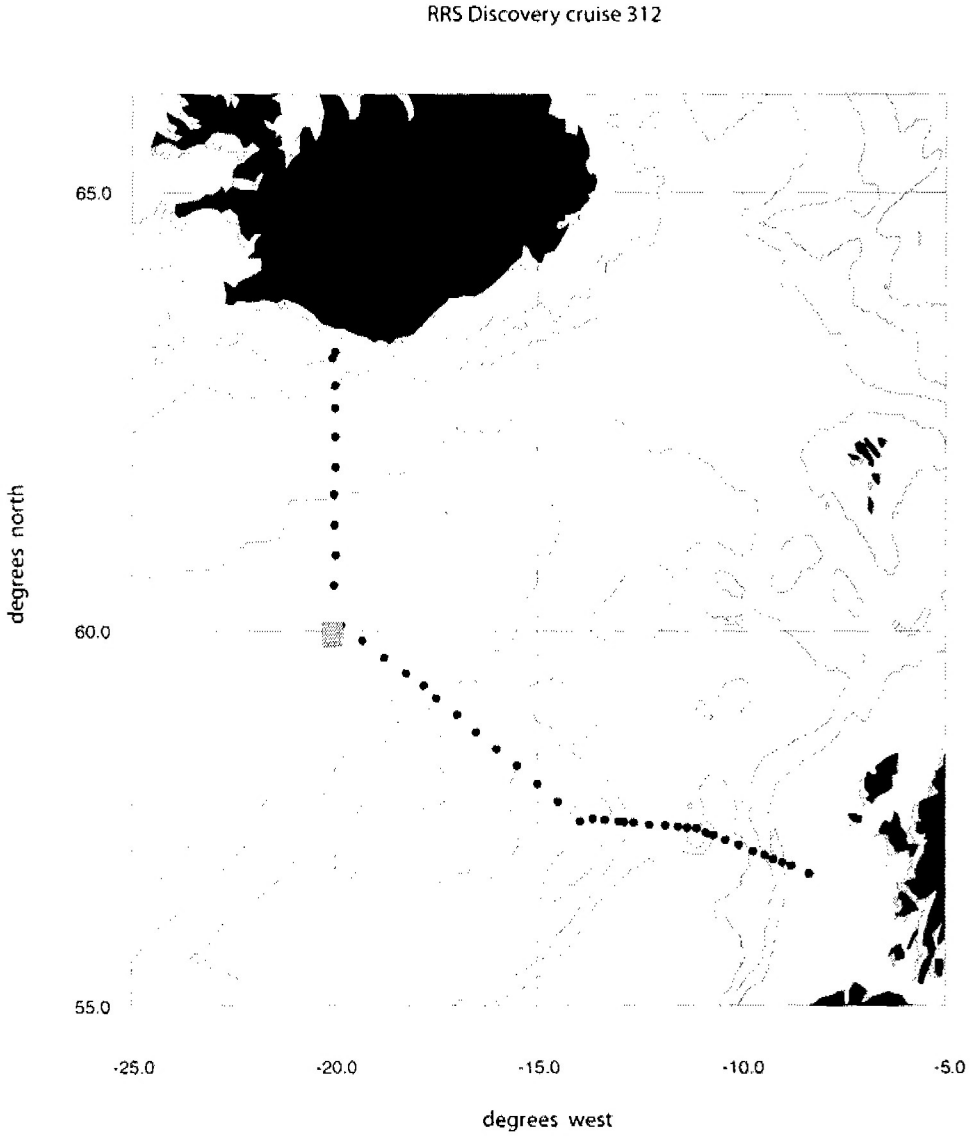
Four moorings at the corners of an ~ 30 km square centered on 60 degrees N, 20 degrees W (water depth ~2750 m). One sediment trap at ~ 2000 m depth and one current meter at ~ 2025 m depth, on each mooring.

5. *Geographical areas*

5.1 Indicate geographical areas in which the project is to be conducted (with reference in latitude and longitude):

52°N > 66°N & 25°W > 5°W.

5.2 Attach chart (s) at an appropriate scale showing the geographical areas of the intended work and, as far as practicable, the positions of intended stations, the tracks of survey lines, and the locations of installations and equipment.



6. *Dates*

6.1 Expected dates of first entry into and final departure from research area of the research vessel:

Expected first entry 11th October 2006
Expected final departure 31st October 2006

6.2 Indicate if multiple entry is expected: Yes

7. *Port calls*

7.1 Dates and names of intended ports of call in ICELAND

Reykjavik 06 – 11 October 2006

7.2 Any special logistical requirements at ports of call:
None

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

Nesskip H.F
Nesskip's House
Austurstrond 1
172 Seltjarnarnes
REYKJAVIK PC101
Iceland

Tel: (00 354) 5639900
Fax: (00 354) 5639919

Email: operations@nesskip.is

8. *Participation*

8.1 Extent to which ICELAND will be enabled to participate or to be represented in the research project:

One berth for an observer from each coastal state is offered in accordance with UNCLOS Art 249 (1a).

8.2 Proposed dates and ports for embarkation/disembarkation:
Embark: Reykjavik 10 October 2006
Disembark: Glasgow 31 October 2006

9. Access to data, samples and research results

9.1 Expected dates of submission to ICELAND of preliminary reports which should include the expected dates of submission of the final results:

Six months after completion of Cruise.

9.2 Proposed means for access by ICELAND to data and samples:

Online Database c/o BODC & CD.

9.3 Proposed means to provide ICELAND with assessment of data, samples and research results or provide assistance in their assessment or interpretation:

Reports/CD/meetings

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9.4 Proposed means of making research results internationally available:

International Peer reviewed journals

10. **COASTAL STATE**: ICELAND

PORT CALL: Embarkation in Reykjavik

DATES: 06 – 11 October 2006

SCIENTIFIC EQUIPMENT **INDICATE "YES" OR "NO"**

List Scientific Work by Function eg: Magnetometry Gravity, Diving, Seismic, Bathymetry, Seabed Sampling, Trawling, Echo Sounding, Water Sampling U/W T.V.: Moored and Towed instrument	**Water Column Incl. Sediment Sampling on the Seabed**	**Fisheries Research within Fishing Limits**	**Research Concerning the Natural Resources of the Continental Shelf or its Physical Characteristics**	**Distance from Coast Between Within 12 NM**	**12 - 200 NM**
Echo sounding, CTD & water sampling, underway water sampling & profiling, water current profiling using vessel mounted ADCP	Yes, only water column	No	No	Yes	Yes
Moored sediment traps and current meters	Yes	No	No	No	Yes

Principal Scientists John T. Allen