APPLICATION FOR THE CONSENT TO CONDUCT MARINE SCIENTIFIC RESEARCH IN AREAS UNDER NATIONAL JURISDICTION OF THE UNITED KINGDOM

Date: 14th February 2007

1. General information

1.1 Cruise name and/or number: MESH 2007 SW approaches canyons survey CE0705

1.2 Sponsoring institution:

Name: Marine Institute

Address: Rinville
Oranmore
Co. Galway
Ireland

Name of Chief Executive: Dr. Peter Heffernan

1.3 Scientist in charge of the project:

Name: Neil Golding

Address: Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
PE1 1JY
Telephone: +44 (0) 1733866840
Email: Neil.Golding@jncc.gov.uk
Telefax: N/A

1.4 Scientist(s) from UNITED KINGDOM involved in the planning of the project

Name(s): Neil Golding
Address: JNCC, Peterborough (as above)

Name(s): Dave Long
Address: British Geological Survey
West Mains Road
Edinburgh
EH9 3LA

1.5 Submitting officer: Bernadette Ní Chonghaile

Name and address: Marine Institute
Rinville
Oranmore
Co. Galway
Country: Ireland
Telephone: 00 353 91 730400
Telefax: 00 353 91 730465

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

2.1 Nature of objectives of the project:

This collaborative cruise, as part of the MESH (Mapping European Seabed Habitats: www.searchmesh.net) project, is to investigate the extent and morphological structure of the submarine canyon system located in the South West Approaches Regional Sea area, and to distinguish the biological communities found within, and in the vicinity of the canyon system, in the context of searching for areas appropriate for consideration as Special Areas of Conservation.

The project will demonstrate and test the application of survey standards and protocols developed under the MESH project. The project will be the first thorough test for the recently completed MESH guidance, providing a 'proof of concept'. In addition, the project will promote MESH across the scientific community.

2.2 Relevant previous or future research cruises:

The area being surveyed has not previously been studied at the resolution planned for this survey. Surrounding areas have been studied as part of the INSS (Irish National Seabed Survey) and by Ifremer (a partner within the MESH project).

2.3 Previously published research data relating to the project:

Some data is available from the INSS (from the Marine Institute/GSI) and from Ifremer.

3. Methods and means to be used

3.1 Particulars of vessel

Name: RV Celtic Explorer

Nationality: Irish

Owner: Marine Institute

Overall length: 65.5m

Maximum draught: 5.7m

Net tonnage: 2435t

Propulsion: Diesel electric propulsion plant 2 inverter controlled variable speed reversing dc propulsion motor in tandem with max total output of 3mw running 16 pitch propeller. Propeller diameter =3500mm, pull at 4knots=ca 30tons

Cruising speed: 14 knots

Call sign: EIGB

Method and capability of communication –

Standard GMDS equipment weather fax NAV tex and mini-m

Phone number: GSM fax= 0876519288

Bridge phone 0872044837

Name of master: Philip Baugh/ Ciaran Flannagan
Number of crew: 14
Number of scientists on board: 17

3.2 Aircraft or other craft to be used in the project:
N/A

3.3 Particulars of methods and scientific instruments

Types of samples and data	Methods to be used	Instruments to be used
Swathe bathymetry & backscatter	Acoustic survey	EM1002 Multibeam
Seismic sampling	Sub bottom profiling	Sparker & Boomer
Remote seabed observations	Underwater video & stills	Underwater camera drop frame
Seabed sediment samples	Box coring/grabs	Box corer/grab (TBC)

3.4 Indicate whether harmful substances will be used:
Formalin may be used to preserve any benthic (seabed) samples taken.

3.5 Indicate whether drilling will be carried out:
N/A

3.6 Indicate whether explosives will be used
N/A

4. Installations and equipment

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

N/A

5. Geographical areas

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

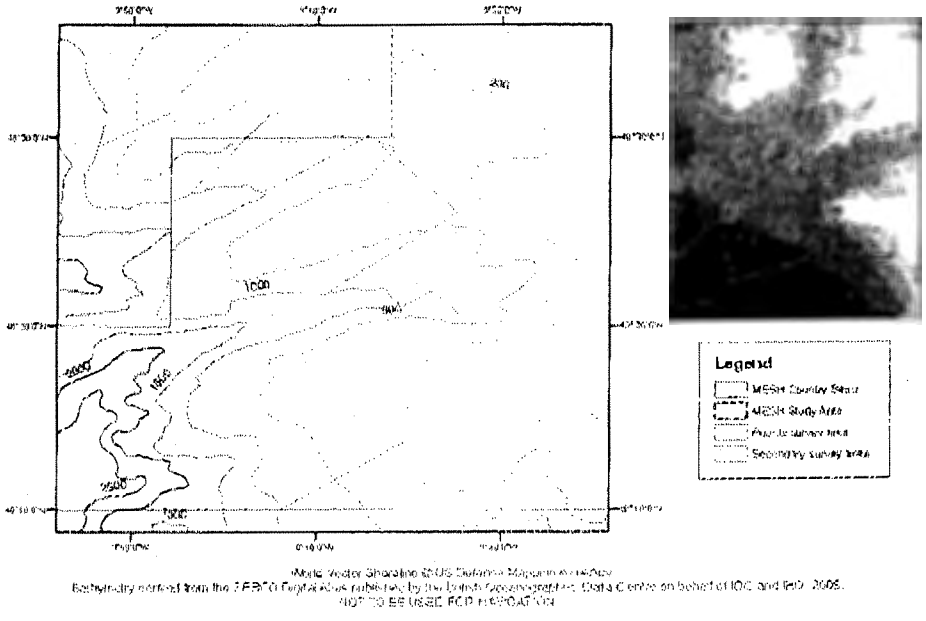
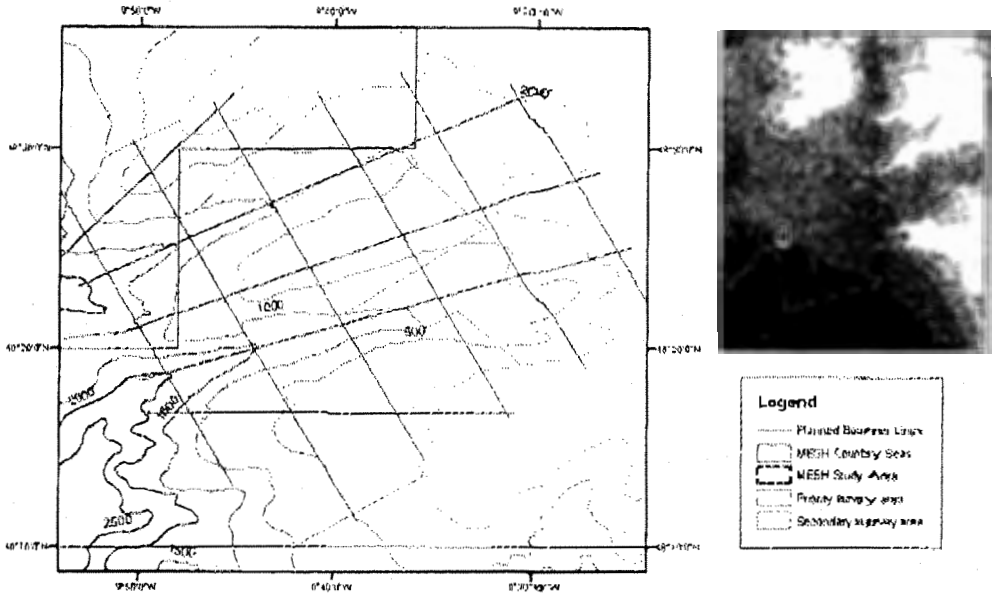


Figure 1: The green shaded area above gives an indication of the extent of the planned survey.

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.



World Vector Shoreline © US Defense Mapping Agency
Bathymetry derived from the GEBCO Digital Atlas published by the British Oceanographic Data Centre on behalf of IOC and IHO, 2003.
NOT TO BE USED FOR NAVIGATION

Figure 2: Planned seismic survey lines. Multibeam will be undertaken in the green shaded areas.

6. Dates

6.1 Expected dates of first entry into final departure from research area of the research vessel:
The survey is planned to take place between 6th June and 18th June 2007.

6.2 Indicate if multiple entry is expected:
N/A

7. Port calls

7.1 Dates and names of intended ports of calls in UNITED KINGDOM:
No UK port calls anticipated

7.2 Any special logistical at ports of call:
N/A

7.3 Names/ Address / Telephone of shipping agent (if available)
N/A

8. Participation

8.1 Extent to which UNITED KINGDOM will be enable to participate to be represented in research project:
The JNCC is the lead partner in the MESH 2007 SW approaches canyons survey. Other UK partners include the British Geological Survey.

8.2 Proposed dates and ports for embarkation / disembarkation:
Proposed port for embarkation (on 6th June 2007) and disembarkation (on 18th June 2007) is Cork, Ireland.

9. Access to data, samples and research results

9.1 Expected dates of submission to UNITED KINGDOM preliminary reports which should include the expected dates of submission of the final results:
Cruise report will be available by end of June 2007, this will clarify further reporting deadlines.

9.2 Proposed means for access by UNITED KINGDOM to data and samples:
A copy of data gathered during the cruise will be held at the Joint Nature Conservation Committee (Peterborough), the British Geological Survey (Edinburgh) and the Marine Institute (Galway, Ireland)

9.3 Proposed means to provide UNITED KINGDOM with assessment of data, samples and research results or provide assistance in their assessment or interpretation:
Data will be analyzed and interpreted with the United Kingdom

9.4 Proposed means of making research results internationally available:
The cruise is being funded through the MESH project, which is an international project. Outputs from the cruise will be disseminated through established communication channels

10. Scientific Equipment

COMPLETE THE FOLLOWING TABLE-
SEPARATE PAGE FOR EACH COSTAL STATE:

INDICATE YES OR NO

LIST SCIENTIFIC WORK BY FUNCTION Eg: MAGNETOMETRY GRAVITY DIVING SEISMICS BATHYMETRY SEABED SAMPLING TRAWLING ECHO SOUNDING WATER SAMPLING U/W TV MOORED INSTRUMENTS TRAWLING ECHO SOUNDING	Water column including sediment sampling of the seabed	Fisheries research within fishing limits	Research concerning the natural resources of the continental shelf or its physical characteristics	DISTANCE FROM COAST		
				Within 12nms	Between 12-200nms	(Continental shelf work only) Beyond 200nm but within the continental margin

Seabed sampling	*YES*				*YES*	
U/W video/stills photography			*YES*		*YES*	
Seismics			*YES*		*YES*	
Echo-sounding			*YES*		*YES*	
Bathymetry			*YES*		*YES*	

(On behalf of the Principle Scientist)

Dated -14/2/07