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

1. GENERAL INFORMATION

1.1 CRUISE NAME AND/OR NUMBER: CV0401

1.2 SPONSORING INSTITUTION:

Name: Marine Institute

Address: Galway Technology Park

Parkmore Galway

Telephone: Telefax:

Name of Director. Dr. Peter Heffernan

1.3 SCIENTIST IN CHARGE OF THE PROJECT:

Name: Dr. Evin McGovern

Address: Abbotstown

Snugborough Road

Castleknock Dublin 15

Telephone: +353-91730403

Name of Director.

Email:

1.4 SCIENTIST FROM IRELAND WITH KNOWLEDGE OF THE PROJECT:

Name: None

Address: N/A

Telephone: Telefax:

1.5 SUBMITTING OFFICER:

Name: Carol Maloney

Address: Marine Institue, Galway Technology Park,

Parkmore, Galway

Ireland

Telephone: +353-91730400 Telefax: +353-91730465

2. **DESCRIPTION OF PROJECT**

2.1 NATURE AND OBJECTIVES OF THE PROJECT:

The survey aims to fulfil Ireland's requirement under the Joint Assessment and Monitoring Programme (JAMP) of the 1992 'Oslo Paris Convention for the Protection of the North East Atlantic' (OSPAR). This requires the answering of 3 key questions:

- 1. What is the spatial distribution of nutrients?
- 2. Are nutrient concentrations changing over time (trends)?
- 3. Are nutrient concentrations significantly elevated (>50%) above salinity related and/or regionally specific background levels?

Question number 3 requires that we all know what the 'background levels' are. This is why we would like to extend the scope of our sampling to include more sample in the Celtic Sea and one transect across St. George's Channel. Allowing us to make an assessment of the nutrient inputs to the Irish Sea.

2.2 RELEVANT PREVIOUS OR FUTURE RESEARCH CRUISES:

The proposed work in UK waters is a repeat of what was done last year. The Marine Institute has been carrying out a winter nutrients survey in the Irish Sea since 1990 and plans to continue the annual surveys for the foreseeable future.

2.3 PREVIOUSLY PUBLISHED RESEARCH DATA RELATING TO THE PROJECT:

McGovern E., Monaghan E., Bloxham M., Rowe A., Duffy C., Quinn A., McHugh B., McMahon T., Smyth M., Naughton M., McManus M. and Nixon E. *Winter Nutrient Monitoring of the Western Irish Sea – 1990 to 2000.* Marine Institute Marine Environment and Health Series, No. 4, 2002.

3. METHODS AND MEANS TO BE USED

3.1 PARTICULARS OF VESSEL:

Name: RV Celtic Voyager Nationality: Irish

Owner: Marine Institute

Operator:

Overall Length: 31.4m

Maximum draught: 3.8m

Gross tonnage: 340 tonnes

Propulsion: Wartsila UD25M5

Maximum speed: 10Kn

Call sign: EIQN

Method/capability of communication (including telex, frequencies):

Tel: 00 353 882789357

Name of master: Captain Philip Baugh

Number of crew: 8

Number of scientists on board: Maximum of 5 at any one time

3.2 AIRCRAFT OR OTHER CRAFT TO BE USED IN THE PROJECT:

None

3.3 PARTICULARS OF METHODS AND SCIENTIFIC INSTRUMENTS:

For methods, see attached standard operating procedure (SOP). Scientific instruments utilized: ADCP, CTD (with transmissometer attached) and Salinometer.

3.4 INDICATE WHETHER HARMFUL SUBSTANCES WILL BE USED:

Ten water samples will be preserved with mercurie chloride (HgCl2). A total of 30ml of the 10mg/ml HgCl2 solution will be on board the ship for preservation and any resulting waste will be stored until disembarking.

3.5 INDICATE WHETHER DRILLING WILL BE CARRIED OUT:

Nο

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):
No equipment to be installed

5. **GEOGRAPHICAL AREAS**

5.1 INDICATE GEOGRAPHICAL AREAS IN WHICH THE PROJECT IS TO BE CONDUCTED (WITH REFERENCE IN LATUTIDE AND LONGITUDE): Carlingford Lough (54.0500°N – 6.1500°W), Irish and Celtic Seas as far south as (51.4000°N) And east as -5.4500°W.

5.2 ATTACH CHART(S) AT AN APPROPRIATE SCALE SHOWING THE GEOGERAPHICAL 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:

See attached map.

6. **DATES**

6.1 EXPECTED DATES OF FIRST ENTRY INTO FINAL DEPARTURE FROM RESEARCH AREA OF THE RESEARCH VESSEL:

Cruise dates January 0th – January 25th. Approximate dates in UK waters: Jan 12th – Jan 15th.

6.2 INDICATE IF MULTIPLE ENTRY IS EXPECTED:

7. PORT CALLS

- 7.1 DATES AND NAMES OF INTENDED PORTS OF CALL IN UNITED KINGDOM: None
- 7.2 ANY SPECIAL LOGISTICAL REQUIREMENTS 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 IRELAND WILL BE ENABLED (NAME OF COASTAL STATE) TO PARTICIPATE OR TO BE REPRESENTED IN RESEARCH PROJECT:

 Open to participation
- 8.2 PROPOSED DATES AND PORTS FOR EMBARKATION/DISEMBARKATION:
- 9. ACCESS TO DATA, SAMPLES AND RESEARCH RESULTS:
- 9.1 EXPECTED DATES OF SUBMISSION TO UK OF PRELIMINARY REPORTS WHICH SHOULD INCLUDE THE EXPECTED DATES OF SUBMISSION OF THE FINAL RESULTS:

A cruise report will be available upon request to the chief scientist from March 1st. final results will be summated to ICES at the end of 2004.

9.2 PROPOSED MEANS FOR ACCESS BY UK TO DATA AND SAMPLES:

All data will be submitted to ICES and can be accessed through the ICES database. Access to samples (if available) can be attained by contacting Evin McGovern at the Marine Institute (evin.mcgovern@marine.ie).

9.3 PROPOSED MEANS TO PROVIDE UK WITH ASSESSMENT OF DATA, SAMPLES AND RESEARCH RESULTS OR PROVIDE ASSISTANCE IN THEIR ASSESSMENT OR INTERPRETATION:

The Marine Institute plan to submit 'National Comments' to OSPAR once every year to two years. This will include an assessment of the data. Further requirements for assistance can be accommodated through contact with Evin McGovern at the Marine Institute (evin.mcgovern@marine.ie).

9.4 PROPOSED MEANS OF MAKING RESEARCH RESULTS INTERNATIONALLY AVAILABLE:

Data will be submitted to ICES.

