

Application for Consent to conduct
Marine Scientific Research

Date: 21/03/2017

1. General Information

1.1 Cruise name and/or number:
CV17014, CV17016, CV17019 and CV17023

1.2 Sponsoring Institution(s):	
Name:	Marine Institute
Address:	Rinville, Oranmore, Co Galway, Ireland
Name of Director:	Dr Peter Heffernan

1.3 Scientist in charge of the Project:	
Name:	Thomas Furey
Country:	Ireland
Affiliation:	Marine Institute
Address:	Rinville, Oranmore, Co Galway, Ireland
Telephone:	+353 9138 7200
Fax:	+353 9138 7201
Email:	Thomas.furey@marine.ie
Website (for CV and photo):	http://www.marine.ie/Home/

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	Koen Verbruggen
Affiliation:	Geological Survey Ireland
Address:	Beggars Bush, Haddington Road, Dublin, D04 K7X4, Ireland
Telephone:	+353 1678 2000
Fax:	+353 1668 1782
Email:	Koen.verbruggen@gsi.ie
Website (for CV and photo):	http://www.gsi.ie/

2. Description of Project

2.1 Nature and objectives of the project:
<p>The INtegrated Mapping FOr the Sustainable Development of Ireland's MArine Resource (INFOMAR) programme is a joint venture between the Geological Survey of Ireland and the Marine Institute. The programme is a successor to the Irish National Seabed Survey (INSS) and concentrates on creating a range of integrated mapping products of the physical, chemical and biological features of the seabed in the near-shore area.</p> <p>The programme is funded by the Irish Government through the Department of Communications, Climate Action and Environment (DCCAE). INFOMAR Phase 1, 2006 to 2015 focused on mapping 26 priority bays and 3 priority areas around Ireland and creating a range of integrated mapping products of the physical, chemical and biological features of the seabed in those areas. INFOMAR Phase 2, 2016 to 2026 intends to map the remainder of Ireland's entire seabed.</p> <p>A range of diverse navigation, environmental and cultural international legislative obligations must also be addressed.</p> <p>The INFOMAR Programme is intended to address these outstanding issues while also delivering an enhanced data management and delivery service for data gathered under both</p>

the INSS and INFOMAR. This data delivery strategy is intended to promote the creation of value added products.

INFOMAR is primarily a multibeam sonar survey. This acoustic technique is providing detailed bathymetry (water depth) data and knowledge of the nature of the seabed and its overlying sediment. Magnetic and gravity techniques are helping to evaluate the nature and structure of the deeper geology.

Other survey techniques are also being used to acquire additional primary datasets including:

- single beam echo sounder
- sub-bottom profiler (shallow seismic)
- water column measures of salinity, conductivity, temperature and speed of sound profiles
- seabed ground-truthing
- sidescan sonar

2.2 If designated as part of a larger scale project, then provide the name of the project and the Organisation responsible for coordinating the project:

2.3 Relevant previous or future research projects:

The Irish National Seabed Survey (INSS) ran from 1999 to 2005. It mapped 432,000 km² and taken along with an earlier DCENR Petroleum Affairs Division, over 81% of the Irish designated seabed area (at end 2005) has been mapped.

The INSS mapped the Irish EEZ deep water areas in to approximately the 200m contour and delivered a national asset that has provided Ireland with a data set to underpin present and future economic, environmental, infrastructural, social and policy issues. In addition significant capacity building has taken place both in terms of Irish marine surveying infrastructure and the development of personnel skilled in the design, planning, implementation and management of a large scale integrated marine resource evaluation programme.

2.4 Previous publications relating to the project:

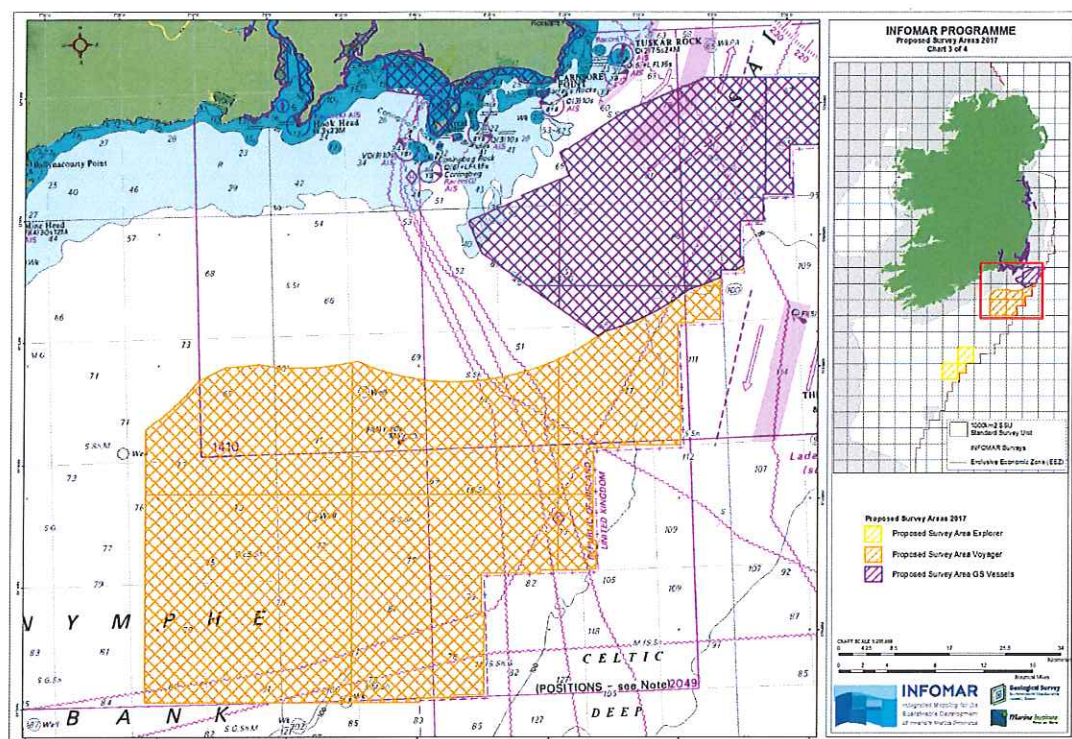
<http://www.infomar.ie/publications/Journals.php>

3. Geographical Areas

3.1 Indicate geographical areas in which the project is to be conducted (with reference in Latitude and longitude in decimal degrees, including coordinates of cruise/track/way points/sampling stations). Please provide coordinates in a separate excel spreadsheet.

Latitude	Longitude	
51 53.520	-6	0.114
51 49.995	-6	0.019
51 49.942	-6	6.037
51 39.988	-6	6.017
51 39.966	-6	17.921
51 30.015	-6	18.019
51 29.983	-6	32.823
51 19.983	-6	33.032
51 20.324	-7	18.239
51 42.565	-7	17.491

3.2 Attach chart(s) at an appropriate scale (1 page, high-resolution) showing the geographical Areas of the intended work and, as far as practicable, the location and depth of sampling Stations, the tracks of survey lines, and the locations of installations and equipment.



The Orange hatched area in the image is the proposed survey area for the Celtic Voyager. This area is in Irish waters but survey line turns will take the vessel into UK waters. The Celtic Voyager will not be conducting seabed sampling in UK waters. A magnetometer will be towed 100 metres behind the vessel. There is no requirement to install any equipment on the seabed.

4. Methods and means to be used

4.1 Particulars of vessel:	
Name:	R.V. Celtic Voyager
Type/Class:	100 A1 Research Vessel, LMC
Nationality (Flag State):	Irish
Identification Number (IMO/Lloyds No.):	
Owner:	Marine Institute
Operator:	P&O Maritime Services
Overall length (meters):	31.4
Maximum draught:	4m
Displacement/Gross Tonnage:	340
Propulsion:	Wärtsilä UD25M5 (626 kW),
Cruising & maximum speed:	<= 10 knots
Call sign:	EIQN
INMARSAT number and method and capability of communication (including emergency frequencies):	GMDSS A class, E-mail. Mini M SAT C and GSM 00 353 91 423396 / 00870 763066755 00870-764687325 / 764687326
Name of Master:	Philip Baugh/Colin McBrearty
Number of Crew:	7
Number of Scientists on board:	8 max

4.2 Particulars of Aircraft:	
Name:	
Make/Model:	
Nationality (flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall Length (meters):	
Propulsion:	
Cruising & Maximum speed:	
Registration No.:	
Call Sign:	
Method and capability of communication (including emergency frequencies):	
Name of Pilot:	
Number of crew:	
Number of scientists on board:	
Details of sensor packages:	
Other relevant information:	

4.3 Particulars of Autonomous Underwater Vehicle (AUV):	
Name:	
Manufacturer and make/model:	
Nationality (Flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall length (meters):	
Displacement/Gross tonnage:	
Cruising & Maximum speed:	
Range/Endurance:	
Method and capability of communication (including emergency frequencies):	
Details of sensor packages:	
Other relevant information:	

4.4 other craft in the project, including its use:

4.5 Particulars of methods, full description of scientific instruments to be used: (for fishing gear specify type and dimension) and location			
Types of samples and Measurements:	Methods to be used:	Instruments to be used:	To be carried out within 12nm (yes or no):
Magnetic Field	Towed fish, 1 metre in length, towed 100 metres behind vessel at less than 5 metres beneath sea surface	SeaSpy magnetometer	No
Bathymetry	Pole mounted, 2 metres beneath vessel	Kongsberg EM2040	No
Sub bottom Profiler	Hull mounted	Pinger	No

4.6 Indicate nature and quantity of substances to be released into the marine environment:
NA

4.7 Indicate whether drilling will be carried out. If yes, please specify:

NA

4.8 Indicate whether explosives will be used. If yes, please specify type and trade name, Chemical content, depth of trade class and stowage, size, depth of detonation, frequency of Detonation, and position in latitude and longitude:

NA

5. Installations and Equipment

Details of installations and equipment (including dates of laying, servicing, method and Anticipated timeframe for recover, as far as possible exact locations and depth, and Measurements):

NA

6. Dates

6.1 Expected dates of first entry into and final departure from the research area by the research vessel and/or other platforms:

17/04/2017 to 01/05/2017, 01/06/2017 to 16/06/2017, 14/07/2017 to 22/07/2017 and 30/08/2017 to 18/09/2017

6.2 Indicate if multiple entries are expected:

Four separate surveys, dates provided above. The vessel will cross into UK waters periodically during line turns during the above dates. The line turns should not take us more than 500 metres inside the UK EEZ.

7. Port Calls

7.1 Dates and Names of intended ports of call:

None in UK. The vessel will use Cork as its port base for all surveys.

7.2 Any special logistical requirements at ports of call:

NA

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

P&O Maritime Ireland
Parkmore Business Park West
Galway, Ireland
Telephone: +353 91 77 3980
Facsimile: +353 91 77 3982

Email: manager.mea@pomaritime.com

8. Participation of the representative of the coastal State

8.1 Modalities of the participation of the representative of the coastal State in the research Project:

NA

8.2 Proposed dates and ports for embarkation/disembarkation:
Cork, Ireland will be the port used. Embarkation dates are the 17/04/2017, 01/06/2017, 14/07/2017 and the 22/07/2017 respectively. Disembarkation dates will be 01/05/2017, 16/06/2017, 22/07/2017 and 18/09/2017 respectively.

9. Access to Data, Samples and Research Results

9.1 Expected dates of submission to coastal State of preliminary report, which should include The expected dates of submission of the data and research results:
December 2017

9.2 Anticipated dates of submission to the coastal State of the final report:
March 2018

9.3 Proposed means for access by coastal State to data (including format) and samples:
All of our multibeam data will be sent to the UKHO for charting. Survey data is then put online at http://www.infomar.ie/ and made freely available to the public.

9.4 Proposed means to provide coastal State with assessment of data, samples and Research results:
We do not anticipate acquiring data in UK waters but we are willing to share our data online.

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples And research results:
The Marine Institute can be contacted at any time using the contact details in section 1.3.

9.6 Proposed means of making results internationally available:
Via the INFOMAR website and appropriate conferences and workshops.

10. Other permits Submitted

10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):
NA

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:
NA

Signature:

Contact information of the focal point:

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Country: Ireland

Affiliation: Marine Institute

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