

APPLICATION FOR CONSENT TO CONDUCT MARINE SCIENTIFIC
RESEARCH IN AREAS UNDER NATIONAL JURISDICTION OF
(UNITED KINGDOM) IRELAND FRANCE
SPAIN
Date: 05/06/2007

1. General information

1.1 Cruise name and/or number: Cetacean Offshore Distribution and Abundance (CODA)

1.2 Sponsoring institution:

Funds are coming from several European sources:

1. Department for Environment, Food and Rural Affairs (DEFRA), UK: Jo Myers, jo.myers@defra.gsi.gov.uk (Euro 375,000)
2. Geotek (DTI), UK: Quentin Huggett, quentin@geotek.co.uk. (Euro 345,000)
3. Department of the Environment, Heritage and Local Government (DUCHAS), Ireland: Elizabeth Sides, elizabeth_sides@environ.ie (Euro 75,000)
4. Bord Iascaigh Mhara (BIM), Ireland: Dominic Rihan, rihan@bim.ie (EURO 10,000)
5. Spanish Cetacean Society, Madrid, Spain: Ana Canadas, alnitak.ana@cetaceos.com (Euro 21,000)
6. Spanish Institute of Oceanography, Spain: Santiago Lens, santiago.lens@vi.ieo.es (Euro 150,000).

1.3 Scientist in charge of the project:

Name: Prof. Phil Hammond

Address: Sea Mammal Research Unit, University of St. Andrews, St. Andrews, Scotland, UK.

Telephone: +44 (0)1334 46322

Email: psh2@st-andrews.ac.uk Fax: +44 (0)1334 462632

1.4 Scientist(s) from UK informed of the planning of the project

Name(s): Mr. Mark Tasker

Address: Joint Nature Conservation Committee Dunnet House, 7 Thistle Place, Aberdeen, AB10 1UZ, Scotland UK

Email: mark.tasker@jncc.gov.uk

Name: Tim Andrews and Jo Myers,

Address: Department for the Environment, Food and Rural Affairs Zone 1/08 B, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6EB UK

Email: tim.andrews@defra.gsi.gov.uk, jo.myers@defra.gsi.gov.uk

Name: Dr Simon Northridge
Address: Sea Mammal Research Unit, University of St. Andrews, St. Andrews, Fife. KY16 8LB.
Email: spn1@st-andrews.ac.uk

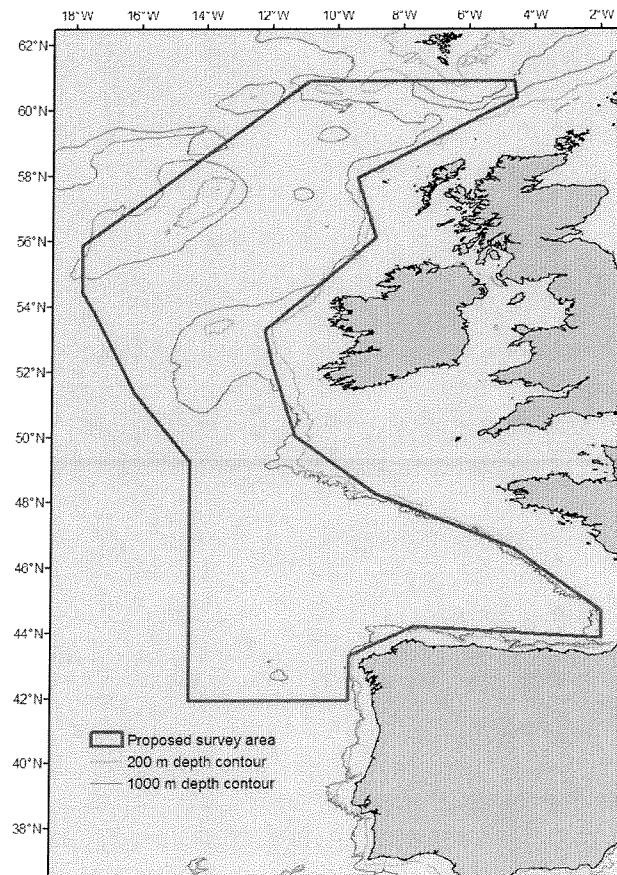
1.5 Submitting officer:

Name: Dr Kelly Macleod
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2. Description of project (Attach additional pages as necessary)

2.1 Nature of objectives of the project:

IN BRIEF: The principal objective is to estimate small cetacean (primarily common dolphin) abundance in European Atlantic offshore waters. Shipboard observation surveys are required to collect data to allow estimation of population sizes that can be used to assess and manage cetacean bycatch in fisheries.



Map of the survey area to be covered during CODA.

FURTHER DETAIL:

The principal objective is to estimate cetacean abundance in offshore European Atlantic waters to provide information that can be used in a management framework to assess the impact of bycatch and recommend safe bycatch limits for common dolphin. Other objectives are to investigate habitat preferences for common dolphins and other species and to obtain information on distribution and abundance of sperm whales and other deep diving species to contribute to our understanding of the impact of industrial and military seismic and sonar activities. Specifically, the objectives are:

- To map summer distribution of common dolphins, bottlenose dolphins, deep diving whales and other cetaceans in offshore waters of the European Atlantic;
- To estimate abundance of common dolphins, bottlenose dolphins, sperm whales and other species, as data allow, in offshore waters of the European Atlantic;
- To develop further the management framework developed under project SCANS-II to assess the impact of bycatch on small cetaceans and to calculate safe bycatch limits for common dolphins.
- To investigate habitat preferences of common dolphin and other species, as data allow, in offshore waters of the European Atlantic.

The survey will be conducted using 4 ships during July 2007. There will be 8 visual observers per ship and a hydrophone will also be towed by each.

2.2 Relevant previous or future research cruises:

Small Cetacean Abundance in the North Sea and adjacent waters (SCANS) was carried out in July 1994 to assess the population abundance of harbour porpoises.

Small Cetaceans in the European Atlantic and North Sea (SCANS-II) was carried out in July 2005. The survey area included the entire European Atlantic continental shelf and abundance estimates were generated for harbour porpoise, common dolphin and other small cetaceans.

The CODA project is also being carried out in conjunction with the Trans-North Atlantic Sighting Surveys (TNASS) project. Four ships will be surveying Faroese, Icelandic and Norwegian waters for cetaceans.

2.3 Previously published research data relating to the project:

The surveys will be conducted between 27th June 2007 and 4th August 2007. All data will be collected during this period.

Other related:

Macleod, K, Scheidat, M. and Hammond, P. 2006. Taking stock of European Cetaceans: The SCANS-II surveys. Presentation to the 20th Annual European Cetacean Society, Poland, April 2006.

Gillespie, D. and Chappell, O. 2002. An automatic system for detecting and classifying the vocalisations of harbour porpoises. *Bioacoustics* 13:37-61.

Hammond, P.S., Berggren, P., Benke, H., Borchers, D.L., Collet, A., Heide-Jørgensen, M.P., Heimlich, S., Hiby, A.R., Leopold, M.F. and Øien, N. 2002. Abundance of harbour porpoises and other cetaceans in the North Sea and adjacent waters. *Journal of Applied Ecology* 39: 361-376.

3. Methods and means to be used

3.1 Particulars of vessel

Name: Mars Chaser
 Nationality: Faroe Islands, registered St. Vincent and the Grenadines
 Owner: Thor Offshore Services
 Operator: Thor Offshore Services, FO-420 Hosvik, Faroe Islands
 Overall Length: 42.15m
 Maximum draught: 7m
 Net tonnage: 156 Gross tonnage: 522
 Propulsion: Diesel Electric
 Cruising Speed: 10 knots Maximum speed: 11 knots
 Call sign: J8B2384
 Method of capability of communication (including telex, frequencies):
 GSM: +298 281426 NMT: +298 28 65 26 Immarsat C: +437 613 910
 Name of Master: Dan Magnussen
 Number of Crew: 5
 Number of Scientists on board: 9

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
Visual sightings data	Visual searches by observers whilst ship steams at 10 knots along transect lines.	Binoculars, cameras, laptop
Passive acoustic data	Passive acoustic array to be towed astern	Hydrophone on 400m cable

3.4 Indicate whether harmful substances will be used:

NO

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):

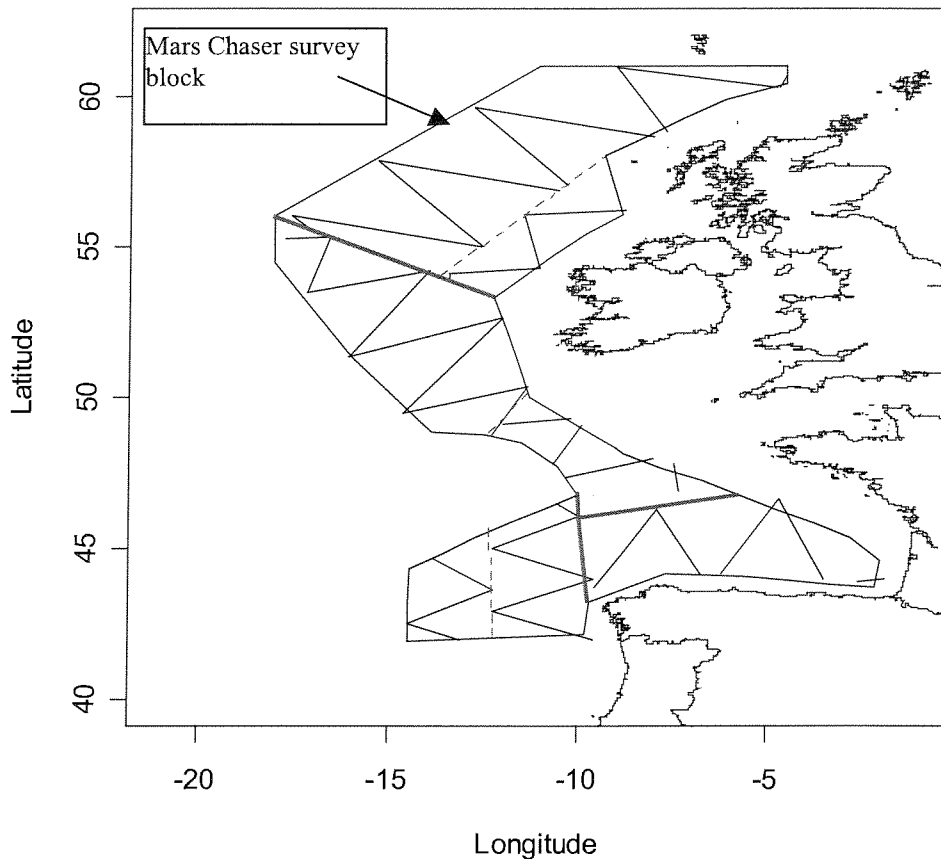
N/A

5. Geographical areas

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

The whole survey will cover offshore waters, beyond the continental shelf (200m contour) from 61°N – 42°N, 2°-17.7°W. This includes waters off UK, Ireland, France and Spain

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:

Mars Chaser will be in survey block from 3rd July – 3rd August 2007.

6.2 Indicate if multiple entry is expected:

None

7. Port calls

7.1 Dates and names of intended ports of call in UK

No port calls planned. Potential anchorage at St. Kilda, west Scotland or Outer Hebrides if need to avoid weather.

7.2 Any special logistical requirements at ports of call:

None

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

N/A

8. Participation

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

The University of St. Andrews, UK is coordinating the project and UK Defra is the biggest funder.

Eight UK scientists are directly involved with the CODA project. A further 4 UK residents will be employed as observers.

Three UK observers will be onboard the Mars Chaser.

8.2 Proposed dates and ports for embarkation/disembarkation:

Ship's port of embarkation: Oban, Scotland 2nd July 2007. Ship's port of disembarkation: Oban, Scotland 3rd August

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:

Non-technical and final report due September 2008.

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

The CODA data will become public access after the completion of the project September 2008. The dataset will be held by University St. Andrews and the European partners.

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

Data will be analysed at the University of St. Andrews and results publicized in a final report and scientific journals. Website will also be updated to make results and interpretation accessible.

9.4 Proposed means of making research results internationally available:

As above

10. COMPLETE THE FOLLOWING TABLE - SEPARATE PAGE FOR EACH COASTAL STATE:

COASTAL STATE: UK

PORT CALL: NONE PLANNED

DATES:

SCIENTIFIC EQUIPMENT		INDICATE "YES" OR "NO"			
List Scientific Work by Function e.g.: 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 <input type="checkbox"/> of the Continental Shelf or its Physical Characteristics	Distance from Coast Between Within 12 NM 12 - 200 NM	
Visual observations	Surface	NO	NO	Beyond 200m depth contour	
Deployment of passive acoustic towed array	Water column	NO	NO	Beyond 200m depth contour	

As the UK does not harvest marine mammals; I do not consider them as "resources".

Completed by:
Dr. K. Macleod, Co-Investigator, CODA, University St. Andrews.