14th MEETING OF THE CMS SCIENTIFIC COUNCIL

Bonn, Germany, 14-17 March 2007

CMS/ScC14/Doc.11 Agenda item 5.3(c)

CLIMATE CHANGE AND MIGRATORY SPECIES: INDICATOR SPECIES AND PROTOCOLS FOR DATA COLLECTION

(Introductory note prepared by the Secretariat)

- 1. The attached specifications of requirements has been prepared by the Department for Environment, Food and Rural Affairs (DEFRA) of the Government of the United Kingdom with a view to commissioning a study aimed to (i) identify a set of (indicator) species whose attributes can act as indicators of likely climate change impacts on the range of migratory species; and (ii) develop standardised international protocols for monitoring the effects of climate change on populations of these migratory indicator species.
- 2. DEFRA has kindly agreed to make the specifications available to the participants in the 14th Meeting of the Scientific Council with the main objective of informing the meeting of the existence of the initiative and its scope, so that it can be taken into account in the planning of the work of the Council and of the Convention on the issue of the consequences of climate change on migratory species. DEFRA also expressed an interest in the possible involvement of the Scientific Council in the review of the interim and final outputs of the project. In this regard, the meeting is expected to express an evaluation of the extent to which it could participate in the review process.
- 3. At the time these specifications are circulated, tenders for the study have already been invited. It should therefore be understood that the circulation of these specifications does not aim at soliciting additional bids.

SPECIFICATION OF REQUIREMENTS

Climate Change and Migratory Species: Indicator Species and Protocols for Data Collection

SUMMARY STATEMENT OF REQUIREMENT

AIMS AND OBJECTIVES

This project has two parts:

- to identify a set of (indicator) species whose attributes can act as indicators of likely climate change impacts on the range of migratory species: and
- to develop standardised international protocols for monitoring the effects of climate change on populations of these migratory indicator species.

ISSUES AND SCOPE

This research requirement is of particular relevance to the Department's responsibilities as a party to the Convention on the Conservation of Migratory Species (CMS) and its associated regional agreements. The contractor will need to take account of this in undertaking the work.

CMS seeks to conserve endangered and vulnerable migratory species by prohibiting their capture or killing; and to facilitate their long-term survival by endeavouring to remove obstacles that hinder migration; protect habitats; and lessen the impact of non-indigenous species. Migratory species are considered important as they can act as linkages between ecosystems, and therefore can be indicators of ecological change.

The eighth Conference of CMS parties received a report from the UK on the strength of links between climate change and migratory species' behaviour, abundance and distribution and passed a resolution on climate change, which amongst other things, called for more research on the subject. A copy of the report can be located at http://defraweb/wildlife-countryside/resprog/findings/climatechange-migratory/index.htm.

The report recommended that indicator species be identified to provide information on the condition of sites and migratory routes used by a range of migratory species. It also identified the need for standardised protocols for data collection and monitoring of climate-change impacts on migratory species, so that information across all range states can be directly compared and combined. This project seeks to take forward those two issues, which in turn will help CMS, its subsidiary daughter agreements, their party states and others play a more active part in addressing the threats to migratory species from climate change.

USES AND USERS OF THE RESULTS

The results will lead to the collection of important data that should help inform policy and priorities at home and abroad. The results will also be used by the Department as a contribution to global efforts to help tackle the adverse effects of climate change.

The findings will be made available to CMS, its regional agreements, the NGO community, the scientific community and others.

DETAILED REQUIREMENTS

Development of indicator-species.

The selected species must be able to act as a proxy for other species showing the effects of climate change on them and on the habitats of the sites they use during migration.

The species selected must be representative of the range of taxa, habitats and migration strategies and there must be data of sufficient quality and quantity to be able to provide a sufficiently rapid signal of potential, actual and changing impacts. The data attributes for the species selected must be made clear (range shifts, timing of migratory events, population size, breeding events etc.)

The study should explain why species were selected. There would be an expectation that a significant number of species, but not all, would be found on the appendices of the Convention on the Conservation of Migratory Species.

Developing standardised protocols for data collection

The study must identify existing mechanisms for the collection, collation and exchange of data on the abundance, distribution and behaviour of the selected indicator species.

It must review the degree to which existing mechanisms have been standardised at national or international level to allow for these data on the selected indicator species to be compared or combined (using, for example, cross-calibration, metadata analysis or revised data collection methodologies).

It must also identify gaps in the development of standardised protocols. This should include an assessment of the gaps in comparing and combining existing national or regional datasets and in the collection of data in specific geographic areas or taxa.

It must also recommend a series of prioritised actions for developing standardised protocols for the selected indicator species and to identify potential sources of funding and administrative support for co-ordination activities, referring to existing European and global initiatives.

Any proposals for revised or new data collection protocols must be capable of being used in both developing and industrialised countries and provide for consistency in the data that are collected as well as the way in which they are collected. The study must show how any new data collection protocols will fulfil these requirements. Proposals for new data collection protocols must also be assessed in terms of practicality, cost and usefulness.

The protocols must provide data to allow informed judgements for policy making and "on-the-ground" action. They must allow for the collection of sufficiently robust data to allow for meaningful analysis.

Amongst other things, the protocols must be able to provide data to identify future problems and thresholds to identify when management is successful. The study should identify what other issues should be covered in the protocols and comment on why they have been included.

The study should also briefly outline what other issues were considered for inclusion but rejected.

The study should also comment on how the protocols would be used as well as identify problems that might inhibit their use and propose solutions to overcome the problems.

The recommendations must receive the endorsement of the Convention on Migratory Species.

OUTPUTS

It is the intention of Defra to publish the results of the work through one or more routes.

A final report of no more than 50 pages covering the policy and scientific background to the work, the methodologies employed, results, conclusions and recommendations suitable for publication on the **Internet**. The report will contain a non-technical executive summary of not more than three pages and should be written in Plain English containing headline results and recommendations. If appropriate, papers for referred scientific journals may also be prepared.

In addition, the contractor shall provide an Executive Summary (no more than 2 sides A4) in the format provided in SID 5 at http://www.defra.gov.uk/science/documents/funding/sid5.doc.

The approved final report suitable for publication must be provided by the contract end date. Further details on publications are given in Annex A. Discussions on these arrangements, including costs and dissemination, would take place towards the end of the contract and may require a variation to the contract to cover any additional costs. Tenderers should

therefore indicate their willingness and ability to undertake responsibility for publishing the final report to Departmental design standards on this basis.

Progress reports (maximum 10 copies) succinctly reporting progress in achieving objectives against the timetable and identifying any proposed changes to the programme of work. These will be produced and circulated at least 10 working days before advisory/steering group meetings.

The **draft final report** (maximum 10 copies) will be submitted **not less than two months** before the end of the project.

The Department may occasionally request **summaries of interim results** during the contract, which may be required in an electronic format to be agreed.

Colour visual aids (35mm or A4 transparencies) of figures and diagrams to illustrate the project will be supplied to the Department for presentation purposes.

QUALITY ASSURANCE

Tenderers should be aware that an application cannot be accepted unless you have read 'The Joint Code of Practice for Research'. Please confirm that you are aware of the Code and that you will use your best efforts to work towards full compliance with it. Further details are available at: www.defra.gov.uk/science/publications/2003/QACoP V8.pdf.

Tenderers must display a good understanding of the issues involved. They should also have the ability to edit and present written material in a clear, concise and informative style. Tenderers will provide **a quality assurance plan** that demonstrates how the quality of inputs and outputs will be ensured. [The final report will be subject to **independent peer review** and the contractor will be expected to respond in detail to reviewer's comments and amend the final report as appropriate].

Tenderers should provide an assessment of risks and a **risk management** strategy.

MANAGEMENT

The Contract will be managed in accordance with the Department's 'Standard Terms and Conditions for Research and Development Contracts'.

The contractor will be managed by an official of the Department who will act as **Contract Manager** responsible for the day-to-day management of the contract. The contractor will appoint a **project manager** who will act as the principal point of contact for the Department.

The nominated official of the Department will be able to contribute to the management of the project through a series of informal and steering group meetings with the contractor during the course of the project.

The Department will establish a small steering group that will comprise representatives from the Department, the statutory conservation agencies and others. The steering group will monitor progress and provide guidance on objectives; output, information needs on technical and analytical matters, and will be chaired by the Contract Manager at times to be agreed. Steering group meetings will be held at approximately three-month intervals. The contractor will be responsible for organising and providing the secretarial and administrative support for these meetings.

Before the end of the contract, the contractor shall attend a meeting with the Department to discuss the management and performance of the contract with a view to informing each other of any strengths and weaknesses exposed.

TIMING

The contract will be expected to last approximately 12 months. The anticipated start date is stated in the invitation to tender letter.

PROGRAMME OF WORK AND MILESTONES

Tenderers are invited to propose a work programme designed to meet the above objectives, requirements and timetable. Tenders should include a time schedule for the work that identifies the main tasks and key milestones that will be used to monitor progress (see enclosed 'Guidance on Submitting a Tender for Defra Research' note for further details).

PROJECT TEAM (INCLUDING SUB CONTRACTORS)

Details of the project team should be supplied indicating the experience of the individuals. The organisation of the project team should be linked to the work programme, indicating the grade of staff and number of days allocated to specific work areas (see 'Guidance on Submitting a Tender for Defra Research' note for further details).

ELECTRONIC SECURITY

Electronic media of any type or format supplied to the Department by the Contractor must be checked for viruses before shipment. The Contractor must provide details of the <u>computer virus detection</u> and virus eradication software (or hardware) that is used to prevent infection and the frequency at which it is updated.

EVALUATION CRITERIA

Tenders will be assessed against the criteria set out below. It is worthwhile trying to assess your own proposal against these criteria before you submit

it. It is important to realise that the Panel will score proposals against each of these criteria. For example, if your proposal is of high quality, but does not provide an adequate description of how the results will be transmitted to the appropriate audience, it will probably be unsuccessful.

The Criteria are:

Quality of proposal

- relevance to Defra specified requirements
- scientific merit
- clear work plan with realistic testable milestones
- clear deliverables
- probability of success

Details of contractor

- expertise, infrastructure
- project planning and management
- · past experience with contractor

Cost

- reasonable & competitive costs
- co-funders

Long-term

- · how are the results to be disseminated
- prospects for technology transfer
- prospects for exploiting IP
- likely long-term relevance of work

ANNEX A: FURTHER DETAILS ON PUBLISHING

Following receipt of the draft final report and a decision on dissemination by the Department, the contractor will be asked to make any amendments or changes which may be required and submit a revised report at no additional cost to the Authority or the Co-funders, and will deliver the final text, together with the original artwork and photographs where appropriate, in a format in accordance with Departmental design standards. The Contractor will be responsible for proof-reading the final report prior to publication. Delivery will be as a paper copy in its final proof read version and in an electronic format compatible with Departmental IT standards (ASCII).

In the event that the Department does not take up its option to publish the final report, the Contractor may be required to undertake publication and dissemination on behalf of the Department at a price which covers all costs reasonably incurred. Prior to publishing, the contractor would be required to obtain a non-exclusive 'Crown copyright: first publishing right'.