

Invitation to Tender
Contracted Expert/Team/Organization to conduct the pilot project to assess the socioeconomic value
of the ecosystem services provided by cetaceans
DRAFT

Background

The International Whaling Commission (IWC) is an intergovernmental organisation established under the 1946 International Convention for the Regulation of Whaling. The Commission has a membership of 88 Contracting Governments, and it meets in plenary every two years.

In 2016, the Commission adopted the resolution on Cetaceans and their Contribution to Ecosystem Functioning (Resolution 2016-3). It directed the Conservation Committee to undertake the review of ecological, management, environmental, social and economic aspects related to the contributions of cetaceans to ecosystem functioning to people and natural systems, as a matter of importance.

The IWC addresses the role of cetaceans in the ecosystem functioning through its Scientific and Conservation Committees. To date, two workshops have been conducted, one led jointly by the IWC Scientific Committee and the Convention on Migratory Species (CMS) during 2021 on cetaceans and ecosystem functioning (SC/68C/REP/03) and reviewed concepts on nutrient circulation, ocean fertilization, whale falls and cetaceans as predators. The other workshop led by the IWC Conservation Committee was held during 2022 and reviewed the socio-economic values of the contribution of cetaceans to the ecosystem functioning (CC/68/REP/SEVCEF/01).

At its 68th biennial meeting, the Commission agreed to a short-term workplan to advance via the development of a pilot project to assess the socio-economic values of a single (or set of) species or populations of cetaceans to the well-being of people and the rest of nature.

About the socio-economic pilot project

The Conservation Committee through its working group on Cetacean and Ecosystem Functioning has established in 2023 an Advisory Group, including but not limited to experts in the ecological, biological, and economic sciences. The Advisory Group has focused its efforts on (1) selection of the species that will be assessed in the pilot project in terms of the economic values it provides from ecosystem functions and services, and (2) the development of Terms of Reference (ToR) to conduct this assessment through a consultancy.

Overall, the pilot project should aim to:

- Part A) assess the economic value of ecosystem services provided by selected species/populations;
- Part B) identify the potential contributions of these species to broader ecosystem functioning, which will require further research to establish links to specific ecosystem services; and
- Part C) explore the design of financial mechanisms and governance schemes that could generate funding derived from these services and reinvested to improve their conservation and restoration.

Further details on the pilot project are set out in the Scope of Work below.

Although the pilot project will inform about the values of ecosystem services provided by cetaceans to the public, the main target audience of the pilot project will be ultimately IWC contracting governments and policy makers.

In consultation with IWC-CMS workshop participants and other experts from within and outside the

IWC Scientific Committee, the advisory group compiled a list of species/population(s) with suitable information on ecosystem functioning and agreed abundance estimates by IWC. These species/populations are proposed to be the target(s) for the pilot project to conduct the socioeconomic analyses: the North Pacific humpback whale; the Southern Ocean whale species assemblage (humpback, blue, fin and minke whales); the Southwest Atlantic southern right whales; and the North Atlantic minke whale.

Application Process

This call seeks a qualified expert/team of experts/organization to undertake the pilot project.

Responses to this Invitation to Tender should provide:

- A description of each expert's background and experience (or staff in the case of organizations), with evidence of how they meet the requirements in the Expert Specifications.
- A brief concept note of no more than 800 words describing the experts' conceptual understanding of the project's objectives and the foreseen methodology/ies and approaches to be applied in meeting these objectives.
- The total cost for the Contractor/Contracted Team to undertake the work, including a cost breakdown of each item in the Scope of Work section below, estimated number of days and associated daily rates.
- Confirmation that the timescales for completing the work can be met, as outlined in the Scope of Work below and/or any amendments needed.
- Confirmation that the Contractor/Contracted Team will be available to have regular meetings with the IWC Secretariat and representatives from the Conservation Committee working group on Cetacean and Ecosystem Functioning.
- Confirmation that the Contractor/Contracted Team will be available, if requested by the Conservation Committee working group on Cetacean and Ecosystem Functioning, to attend part of the Commission Scientific or Conservation Committee meeting.

Applications will be accepted until **INSERT DATE** and should be sent via e-mail with the subject "Tender Application – Pilot Project Socioeconomic Valuation of Cetacean Ecosystem Services" to: secretariat@iwc.int

All responses will be acknowledged.

Contractor/Contracted Team/Organization Specifications

The following academic and experience requirements should be met by the expert, team of experts of staff in the case of organization:

- Documented experience in a field related to environmental/ecological economics, a MSc and/or a PhD in any of these disciplines will be highly desired.
- At least 5 years of experience in conducting ecosystem services analyses, including market and non-market methods.
- At least 5 years in designing financial mechanisms based on the economic value of natural capital.
- Good knowledge related to the contributions of marine biodiversity, particularly cetaceans, to the ecosystem functioning and their associated ecosystem services. Experience in management of marine resources and policy development would be an asset.

- Excellent and demonstrable interpersonal skills, with an ability to engage and work with a variety of stakeholders, particularly from ecological and economical fields as well as managers and policy makers.
- At least one of the experts should be fluent in spoken and written English and have the capacity to prepare high quality documents and oral presentations.

Evaluation of Applications

Applications will be evaluated against the criteria outlined in the *Contractor/Contracted Team/Organization Specifications* and followed by interviews for shortlisted applicants (via Zoom). The selection of applicants will be carried out by members of the IWC Conservation Committee working group on Cetacean and Ecosystem Functioning and the IWC Secretariat.

The successful applicant(s) will be notified by **INSERT DATE**. The contract is expected to be signed in **January 2025** and work should be completed within **eight months** after the contract is signed.

Scope of work for the pilot project to assess the socioeconomic value of the ecosystem services provided by cetaceans

The pilot project represents a first step from the IWC to start understanding the scope and magnitude of the ecosystem services provided by cetaceans. It is anticipated that much modelling work will be undertaken in the future, but given the limitations associated with current data, the pilot project should reduce the scope to have better quality data and accurate estimated numbers for such services that are easier to value and provide broad estimates for those services where the ecological modelling is not still clear or not yet developed.

The pilot project is not intended to assess the full value of the target species/populations, or assemblage of species, rather it is intended to provide a representation of which ecosystem functions could provide specific ecosystem services and how any specific ecosystem service value can be assessed. As a pilot project, there is a need to limit the number of services to be valued with the intention of using the results as a framework to advance future socio-economic analyses.

The pilot project should consider *inter alia* climate regulation (through carbon sequestration within biomass, including body and carcasses). The application of the Social Cost of Carbon, a market-based measure, should be straight-forward for estimating the climate regulation value of several cetacean species over time. However, these estimates would likely represent only a small component of the contributions to this sequestration that could be valued economically.

The IWC-CMS workshop identified 26 different traits that are used to model ecosystem functions ([SC/68C/REP/03](#)). The Contractor/Contracted Team will have to consider the potential use of these functions to be linked to any ecosystem service.

Notwithstanding the value of other ecosystem services, such as whale watching or subsistence whaling, the IWC resolutions were aimed at understanding the contributions of cetaceans to ecosystem functioning; that can also be linked to species ecosystem services, but not to any cultural or recreational services. In addition, these other services would require a completely different modelling approach to estimate the associated values (assessment of cultural values, analysis of whale watching market and trends over years, etc.). Therefore, the main work of the consultancy should focus on the ecosystem services related to the role of cetaceans in ecosystem functioning.

This call for tender seeks to identify a Contractor/Contracted Team/Organization that will develop the pilot project and provide advice on future developments to policy makers.

Working closely with the IWC Secretariat, the IWC Conservation Committee working group on Cetacean and Ecosystem Functioning and experts from the IWC Scientific Committee Standing Working Group on Ecosystem Modelling, the Contractor/Contracted Team/Organization will:

Part A

- Conduct a literature review on economic aspects related to valuation of ecosystem services and their applicability to cetaceans and their role in ecosystem functioning¹, with a focus on species selected for the study (if data allows it).
- Identify species' services where a connection between supporting services and economic data can be provided.
- Provide accurate estimates of economical valuation (including a sensitivity analysis if possible) for the identified ecosystem services that are feasible to assess (*i.e.* climate regulation through carbon sequestration within biomass, including body and carcasses) for all target populations (North Pacific humpback whale; the Southern Ocean whale species assemblage (humpback, blue, fin and minke whales); the Southwest Atlantic southern right whales; and the North Atlantic minke whale)
- Compare the economic valuation of target populations between current population size and pre-exploitation population size, whenever possible.

Part B

- Identify research needs to establish links from the other ecosystem functions identified at the IWC-CMS 2021 workshop to ecosystem services where it is not possible to appropriately link them.
- Develop a modelling framework that could guide future research work to assess other ecosystem services from cetaceans.
- Provide broader economic valuation estimates, using different scenarios, for those ecosystem services that may have less data and modelling available (for example: carbon sequestration through primary productivity and/or fisheries increase due to nutrient cycling) on the selected species or assemblage of species (e.g Southern Ocean) that may have sufficient information. The methodologies used and their limitations should be clearly explained by the contractor.

Part C

- Identify international and regional governmental organisations and entities across the UN and non-UN with work on Nature Based Solutions or any other similar approach such as Blue Carbon and provide information on the scope of their work and its relevance.
- Explore and propose alternatives for a future financial mechanism and governance schemes to improve the conservation and restoration of cetacean species.

Other

- Assist with the preparation of documents and presentation materials (PPTs and the like) on the Pilot Project outcomes for the Scientific Committee, Conservation Committee and Commission meetings.
- Report and present of results (see details below under **Reporting**).

Working Methods

This work will be conducted through a combination of i) desktop review of relevant materials, including *inter alia* the Commission' information; ii) liaison with ecological and economical experts from within and outside the IWC and; iii) liaison with experts from the IWC Scientific Committee Standing Working

¹ Note: A literature review on ecological aspects had already conducted for the IWC-CMS 2021 workshop (Roman, J., Kiszka, J., Pearson, H., Savoca, M. and Smith, C. 2021. Ecological Roles and Impacts of Large Cetaceans in Marine Ecosystems. Paper SC/68C/EM/05 presented to the IWC.)

Group on Ecosystem Modelling and the IWC Conservation Committee working group on Cetacean and Ecosystem Functioning, as well as any other interested party in the IWC community.

The Contractor/Contracted Team/Organization will inform the Secretariat before contacting external stakeholders.

Support to Contractor/Contracted Team/Organization

The Secretariat will assist to ensure all required documents are available and will establish contact between the Contractor/Contracted Team/Organization and key stakeholders in the IWC community.

The Secretariat will provide guidance on an ongoing basis, as required. The Contractor/Contracted Team/Organization will be able to draw on the expertise of the IWC Conservation Committee working group on Cetacean and Ecosystem Functioning and IWC Scientific Committee Standing Working Group on Ecosystem Modelling.

Reporting

During the consultancy, at least monthly meetings will be held (remotely) between representatives of the IWC Conservation Committee working group on Cetaceans and Ecosystem Functioning, the IWC Secretariat and the Contractor/Contractor Team/Organization to monitor progress, answer questions and (if necessary) make appropriate arrangements.

The Contractor/Contractor Team/Organization will provide a progress report to the IWC Conservation Committee working group on Cetaceans and Ecosystem Functioning after 3 months of signing the contract.

A final report will be required upon completion of the work, **after 8 months of signing the contract**, as well as any necessary document/presentation materials (graphs, PPT, etc.) to inform the IWC Commission and its Scientific and Conservation Committee.

A second joint IWC-CMS scientific workshop is scheduled for Bonn, Germany from November 14-16, 2023 to review modelling methods on ecosystem functioning. It is envisaged that the outcomes from this second scientific workshop on cetaceans and ecosystem functioning will be helpful to, and should be considered by, the Contractor/Contracted Team/Organization when developing the pilot project.

It is also envisaged that the Contractor/Contracted Team/Organization may be requested to attend next IWC biennial meeting, Scientific or Conservation Committee meetings, for a limited period of time, to present outcomes of the pilot project.

Work schedule

The work will commence by **January 2025**. Upon commencement of the contract, the Contractor/Contracted Team/Organization and the IWC Secretariat will agree a detailed work schedule, which will include the following milestones:

Task	Completion date (INSERT DATE)
Contractor familiarized with consultancy approach and timeline. Identify and propose any changes needed to the proposed pilot project structure.	Week 1
Completion of literature review	Month 1
Completion of identification of entities with work on Nature Based Solutions and alike	Month 1
Completion of economic valuation and sensitivity analyses	Month 5
Prepare progress report for review by the IWC Scientific Committee and Conservation Committee	Month 3
Incorporate feedback received to the progress report	Month 4
Completion of broad estimates for other ecosystem services	Month 6
Completion of comparisons between current and pre-exploitation population size	Month 6
Completion of identification of research needs and development of modelling framework	Month 7
Completion of proposals for future financial mechanism and institutional arrangement	Month 8
Monthly meetings to update on progress	Ongoing throughout project
In collaboration with the IWC Secretariat, seek review from IWC community including Scientific Committee and Conservation Committee experts and other experts outside the IWC	Ongoing throughout project
Project completion and final report	Month 8
Assist with the preparation of documents and presentation materials	Month 8
Attend (virtually or in person) proposed meeting(s)	To be defined

Budget

The maximum budget available for tasks detailed in the Scope of Work above is **INSERT AMOUNT**. The contract will be paid over three payments: 25% upon signing of the contract, 25% after reception of progress report and 50% after completion of the project and deliverable of project final report and supporting materials.

If requested by the IWC Conservation Committee working group on Cetacean and Ecosystem Functioning, costs of the participation of contracted expert(s) representative to attend one meeting of the Commission, Scientific or Conservation Committee for the requested period will be covered separately.