

INTERNATIONAL COMMISSION FOR THE  
CONSERVATION OF ATLANTIC TUNAS



COMMISSION INTERNATIONALE POUR LA  
CONSERVATION DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA  
CONSERVACION DEL ATUN ATLANTICO

Madrid, a 24 de marzo de 2023

## CIRCULAR ICCAT # 2476 / 2023

**ASUNTO: CONVOCATORIA DE OFERTAS – TÉRMINOS DE REFERENCIA – INVESTIGACIÓN DE LAS METODOLOGÍAS DE ESTIMACIÓN DE LAS CAPTURAS FORTUITAS**

Me complace enviar adjunta la convocatoria de ofertas para la *investigación de las metodologías de estimación de las capturas fortuitas*.

Le agradecería que distribuyera esta convocatoria de ofertas entre las instituciones y personas cualificadas que pudieran estar interesadas.

Le saluda atentamente,

*Secretario ejecutivo*



Camille Jean Pierre Manel

### **DISTRIBUCIÓN:**

– **Cargos de la Comisión:**

<b>Presidente de la Comisión:</b>	E. Penas Lado	<b>Presidente del COC:</b>	D. Campbell
<b>Primera vicepresidenta:</b>	Z. Driouich	<b>Presidente GTP:</b>	N. Ansell
<b>Segundo vicepresidente:</b>	R. Chong	<b>Presidenta del STACFAD:</b>	D. Warner-Kramer
<b>Presidentes Subcomisiones 1 a 4</b>		<b>Presidente del SCRS:</b>	C. Brown

– **Jefes de delegación/jefes científicos**

– **Partes, Entidades o Entidades pesqueras no contratantes colaboradoras**

**Documentación adjunta:** Términos de referencia y convocatoria de ofertas (solo versión en inglés).

## TERMS OF REFERENCE

### INVESTIGATION INTO BYCATCH ESTIMATION METHODOLOGIES

#### 1. Background and Objectives

The complete and total accounting of the bycatch of non-targeted species within the ICCAT arena is becoming an increasingly important source of concern for the ICCAT Commission. The bycatch of species such as billfish (Blue Marlin, White Marlin and Round-scale Spearfish) and several species of Sharks are not always well documented, yet account for a non-negligible percentage of the total fish kill associated with the fishing operations. Not properly accounting for this bycatch, either kept or discarded, in the assessment process can lead to errors and/or biases in the management advice provided to the Commission. Recognizing the importance of an accurate accounting of bycatch, the Commission established in [Recommendation by ICCAT to establish rebuilding programs for blue marlin and white marlin/roundscale spearfish \[Rec. 19-05\]](#) which states in the following paragraphs:

1. CPCs shall provide their estimates of total live and dead discards of blue marlin, white marlin/roundscale spearfish, based on fishing logbooks, landing declarations, or equivalent document for the sport/recreational fisheries, as well as scientific observer reports, as part of their Task 1 and 2 data submission to support the stock assessment process.
2. No later than 2020, CPCs shall present to the SCRS the statistical methodology used to estimate dead and live discards. CPCs with artisanal and small-scale fisheries shall also provide information about their data collection programs.
3. The SCRS shall review these methodologies and if it determines that a methodology is not scientifically sound, the SCRS shall provide relevant feedback to the CPCs in question to improve the methodologies.
4. The SCRS shall evaluate the completeness of Task 1 and 2 data submissions, including estimates of total dead and live discards, and determine the feasibility of estimating fishing mortalities by industrial fisheries (including longline and purse seine), artisanal fisheries and recreational fisheries. If after conducting such evaluation, the SCRS determines that significant gaps in data reporting exist, the SCRS should explore approaches to estimate the level of unreported catches to include in future stock assessments in order to enhance the basis on which to provide management advice to the Commission.

At the 2022 [Meeting of the Working Group on Stock Assessment Methods \(WGSAM\)](#) the Group was presented with the products of the work funded under the 2021 contract entitled “Efficacy of a bycatch estimation tool” ([SCRS/2022/105](#)). This work presented a newly developed R library for semi-automated total bycatch estimation using model-based and design-based estimators. The method was tested using simulated observer and logbook data from three simulated fleets in the Atlantic generated by LLSIM (longline simulator, Goodyear *et al.*, 2021) with a decreasing trend in blue marlin abundance over time. Simulations included a range of observer coverage levels, with random allocation or biased allocation proportional to swordfish or blue marlin catch. The bycatch estimation tool performed well and produced reasonably unbiased estimates of the total blue marlin bycatch for all methods.

An important next step is to apply the method to real CPC data. There is also a need for beta testing, and training. These could all be combined, in that CPC scientists or Species Group members with data could work with the developers to learn the tool, apply it to their data, and identify any issues that need to be addressed in the software development. Having CPC scientists apply the tool to their own data would be one solution to the problem that observer data is often confidential. They could also supply data for the developers to apply the tool with a confidentiality agreement. It is important to have participation by the data holders so the tool can be made robust to the specific issues that come up in each data set. Therefore, the Group recommends an expert to be contracted to further develop and evaluate these tools.

## 2. Contractor Tasks

- Conduct a 3-5 day in-person beta-testing/capacity-building workshop in early (tentatively between **3-6 July 2023**), with a select group of ICCAT CPC experts with the objective of beta testing the bycatch estimator. The Chair of the WGSAM, the SCRS Chair and the ICCAT Secretariat will choose this group of experts based on their expertise and the fisheries and data they represent. The contractor will guide the experts through the use of the bycatch estimator using actual observer data provided by the expert. During, and for a limited time after, this time the experts will provide feedback regarding any bugs in the estimator and possible modifications.
- The bidder will use the testing results and feedback from above mentioned workshop participants to make any modifications to the bycatch estimator necessary to ensure the estimator adheres to “best practices” and produces defensible results.

## 3. Deliverables

- At least one month before the above-mentioned workshop the successful bidder shall provide a detailed agenda for the workshop. This agenda will include the time and location of the workshop as well as the stated objectives. The agenda should note that translation services will not be available for the meeting.
- The successful bidder shall provide a **SCRS document** to be presented during the 2024 Meeting of the Working Group on Stock Assessment Methods (WGSAM) and possibly the 2024 Intersessional meetings of Sub-Committee on Ecosystems and Billfish Species Group. Such document shall make clear any modifications or improvements that need to be made to address the beta testing concerns. If appropriate, the bidder's report shall include suggestions on the next stage of development and any suggestions for furthering the use of the tool via a second, wider reaching workshop.
- Comments on the above mentioned SCRS document that might be provided by the Rapporteur of the Working Group on Stock Assessment Methods (WGSAM), the SCRS and/or the ICCAT Secretariat, shall be taken into consideration by the contractor, and included in a **draft final report** (formatted as an SCRS document), to be submitted to the Secretariat no later than **14 October 2023**. The draft report shall include a:
  - a) Executive Summary (limited to 180 words);
  - b) Full description of the work carried out;
  - c) Detailed description of final results achieved;
  - d) List of references and literature cited.

The **final report** (formatted as an SCRS document) shall be updated taking into account the comments provided by the Rapporteur of the WGSAM, the SCRS Chair and the ICCAT Secretariat, and be submitted by **31 October 2023** at the latest.

All documents should be written in English.



#### 4. Contractor Minimum Qualifications

- Documented multi-year experience in bycatch estimation models (e.g. Goodyear, 2017) and commercial logbook and/or observer data analysis, and R-programming.
- University degree in one of the following: fisheries science, marine biology, statistics, natural sciences, biological sciences, environmental sciences or closely related fields (in case of individual scientists).
- Excellent working knowledge of at least one of the three official languages of ICCAT (English, French or Spanish). A high level of knowledge of English is desirable.

#### 5. Submission of proposals

Scientists and public or private Scientific Institutes or entities interested shall submit detailed offer(s) only to the attention of Mr. Camille Jean Pierre Manel, the Executive Secretary of ICCAT, at the following address: [camille.manel@iccat.int](mailto:camille.manel@iccat.int) and Cc'ing Ms. Ana Martinez ([ana.martinez@iccat.int](mailto:ana.martinez@iccat.int)) by **14 April 2023 (18:00 Madrid time) at the latest**, including:

- a) A description of methodology to be used;
- b) Declaration of commitment of the provision of access to pop-up satellite data;
- c) The budget proposal;
- d) A short Curriculum vitae of the tender (in case of individual scientists, i.e., the 5 most relevant papers and involvement in recent CPUE standardization, fishing gear simulation, or stock assessment projects;
- e) The name, address, and telephone number of the tendering body;
- f) The institutional and administrative background of the tendering body (e.g., statutes, type of institution, annual budget, budget control procedures, etc.), if applicable;
- g) Acknowledgement of this Quotation request;
- h) A statement specifying the extent of agreement with all terms, conditions, and provisions herein included.

If the tender is submitted by an institute/University, it must indicate the expert(s) who will be dedicated to the design and programming tasks and that he/she be available to attend the 2024 Meeting of the Working Group on Stock Assessment Methods (WGSAM). Offers sent after the deadline or that fail to furnish the required documentation or information or reject the terms and conditions of the Call for Tenders will not be considered.

Interested scientists and public or private Scientific Institutes or entities interested to apply shall provide a detailed budget and clearly identify costs related to main activities of the work (e.g., labour, including estimated number of days of work; travelling and subsistence).

For additional information or clarifications please contact the Secretariat at: [miguel.santos@iccat.int](mailto:miguel.santos@iccat.int).



## 6. Selection of proposals

The ICCAT Secretariat will make a revision of the offer(s). Following the revision process, the ICCAT Executive Secretary will notify the entity selected for the contract as soon as the selection process is completed. Contract will be awarded on the basis of competitive tendering and the evaluation of proposals will be undertaken objectively, consistently and without bias towards particular suppliers. Proposal(s) will be evaluated against a pre-determined set of criteria, which include: (i) cost; (ii) proven track record; (iii) technical merit based on work plan; and, (iv) flexibility to future changes to requirements.

## 7. Duration of the contract

The work under this contract shall be concluded by **31 October 2023**. If required and strictly necessary, the contract may be is opened for extension, depending on funding availability and on the priorities of the ICCAT Working Group on Stock Assessment Methods (WGSAM).

## 8. Payment details

Disbursements will be made according to the following schedule:

- 40% of the total amount of the contract upon signing of the contract and after receiving a regular invoice which may be submitted at the latest 30 days after the signature of the contract;
- 40% of the total amount of the contract upon submission of the Draft final report **no later than 10 October 2023**. The Rapporteur of the Working Group on Stock Assessment Methods (WGSAM) and the SCRS Chair, in consultation with the ICCAT Secretariat, will review all submissions of the contract deliverables and communicate any necessary revisions (if applicable) to the Contractor and/or inform of approval within 5 days of the submission(s). The Contractor shall submit the revised final documents (if changes are requested) together with the regular invoice, within 15 days after the aforementioned 5 days period.
- 20% after the approval of the final revised version of the report, and after receiving a regular invoice and a complete set of the documents concerning the expenses incurred under the contract.

## 9. Logistics

The text report shall be in MS Word or compatible software. All other documents provided by the Contractor must be in Open Office, Latex or compatible software. All documents submitted must be in English.

## 10. Copyright

All the material produced by the Contractor will remain the property of ICCAT. All software written by the Contractor will be licensed under GLP or similar open-source license.

For additional information concerning this Call for Tenders, please contact ICCAT Secretariat at the following address: [info@iccat.int](mailto:info@iccat.int) or [miguel.santos@iccat.int](mailto:miguel.santos@iccat.int).