

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 9 de noviembre de 2023

CIRCULAR ICCAT # 12092 / 2023

ASUNTO: CONVOCATORIA DE OFERTAS - EVALUACIÓN DE LA CONFIGURACIÓN Y EL CÓDIGO DE SIMULACIÓN DE CIRCUITO CERRADO DEL PEZ ESPADA DEL ATLÁNTICO SUR

En 2022, el SCRS realizó una serie de estudios de simulación de circuito cerrado que examinaron el desempeño de un pequeño conjunto de procedimiento de ordenación para el stock de pez espada del sur. La reunión de evaluación de stock de pez espada del Atlántico de 2022 del Grupo de especies de pez espada recomendó que se llevara a cabo un conjunto ampliado de simulaciones de circuito cerrado para el stock de pez espada del sur utilizando modelos operativos adaptados a dicho stock y que se realizara una revisión de la configuración de la simulación y del código utilizado para el análisis.

Me complace transmitirle la convocatoria de ofertas adjunta para la evaluación de la configuración y el código de la simulación de circuito cerrado del pez espada del sur.

Le agradecería que distribuya 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:

Presidente de la Comisión: E. Penas Lado
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Presidente del COC: D. Campbell
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– Jefes de delegación/Jefes científicos

– Partes, Entidades o Entidades pesqueras no contratantes colaboradoras

Documentación adjunta: Términos de referencia de la Convocatoria de ofertas (sólo en inglés).

Terms Of Reference

Code Review for Southern Swordfish Closed Loop Simulations

1. Background and objectives

Work on a set of closed-loop simulations for southern Swordfish began in 2022. The basic approach was to develop multi-variate priors on steepness (Mace and Doonan, 1988), natural mortality, and growth ([Taylor et al., 2022a](#)) that would form the basis for a set of closed-loop simulations ([Taylor et al., 2022b](#)). These demonstrated the performance of a set of Management Procedures like the historical surplus-production modeling approaches that have been applied to the stock. The [2022 Atlantic Swordfish Stock Assessment Meeting](#) of the Swordfish Species Group recommended that an expanded set of closed-loop simulations be conducted for the southern swordfish stock using Operating Models tailored to that stock and that there be a review of the simulation setup and the code used for the analysis.

In 2023, a broader set of simulations was done including Operating Models based on cluster analyses ([Taylor 2023](#)) that estimated sets of catch per unit effort (CPUE) indices with similar trends, modification of the initial Taylor et al., 2022a prior to include covariance in the growth parameters, development of a second prior based the [FishLife database](#), and evaluating an expanded set of Management Procedures.

2. Activities

Over the contract's duration, the contractor will review the simulation set-up and code and provide a brief report on the validity of the technical approach used and suggest areas of improvement.

3. Contractor Qualifications

The Contractor shall have the following minimum qualifications:

- A Ph.D. in fisheries science or related field;
- A minimum of five years' experience developing open-source management strategy evaluation in R with up-to-date repositories on CRAN and/or GitHub using the OpenMSE set of packages;
- An established history (greater than five years) or interactive participation in MSE processes at Regional Fisheries Management Organizations (RFMOs) or bilateral management organizations.

4. Deliverables

Deliverables and the due date are provided below:

<i>Deliverable</i>	<i>Delivery Date</i>
#1 An SCRS document detailing the Contractor's review and analysis of the code and simulation setup including any code modifications identified as potential improvements.	26/04/2024
#2 A draft final technical report formatted as an SCRS document (updated of deliverable #1) that addresses any comments or edits provided by the Swordfish Species Group, the SCRS Chair and/or the Secretariat.	28/06/2024
#3 A final technical report formatted as a SCRS document in case any additional minor comments or edits are provided by the SCRS and/or the Secretariat.	11/10/2024

5. Payment details

Disbursements will be made according to the following schedule:

- 1) 30% 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;
- 2) 30% of the total amount of the contract upon the provision by **26 April 2024** of an SCRS document (deliverable #1) detailing the Contractor's review and analysis of the code and simulation setup including any code modifications identified as potential improvements signing of the contract and after receiving a regular invoice;
- 2) 40% after the acceptance of the final report (deliverable #3) that should be submitted by **11 October 2024**, upon incorporation of comments made by the Swordfish Species Group, the SCRS Chair and/or the Secretariat to the draft final report (deliverable #2, submitted by 28 June 2024).

6. Submission of proposals

Scientists of public or private Scientific Institutes or companies 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 and Cc'ing Ms. Ana Martinez (ana.martinez@iccat.int) by **8 December 2023** (18:00h Madrid time) at the latest, including:

1. A description of methodology to be used;
2. The detailed budget proposal, including number of days of work and daily rate;
3. A short Curriculum Vitae of the Tender detailing the experience regarding the minimum qualifications defined above;
4. The name, address, and telephone number of the tendering body;
5. The institutional and administrative background of the tendering body (e.g., statutes, type of institution, annual budget, budget control procedures, etc.), if applicable;
6. Acknowledgement of this Quotation request;
7. A statement specifying the extent of agreement with all terms, conditions, and provisions herein included.

Offers sent after the deadline and/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.

Applicants 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, equipment, system setting and maintenance).

7. Selection of proposals

The ICCAT Secretariat will review the bid(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.

8. Duration of the contract

The work under this contract shall be concluded by **1 October 2024** at the latest. If required and strictly necessary, the contract may be opened for extension, depending on funding availability.

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, or compatible software. All documents submitted must be in English, French, or Spanish.

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 licence and made available to ICCAT in a GitHub repository.

References

- Mace, P. M., & Doonan, I. J. 1988. A generalized bioeconomic simulation model for fish population dynamics. New Zealand Fisheries Assessment Research Documents, 88/4.
- Taylor, N.G., Sharma, R., and Arocha, F. 2022a. A Stochastic Prior for Atlantic Swordfish Derived from Life History Parameters. Collect. Vol. Sci. Pap. ICCAT, 79(2): 693-704.
- Taylor, N.G., Mourato, B., and Parker, D., 2022b. Preliminary close-loop simulation of Management Procedure performance for southern swordfish. Collect. Vol. Sci. Pap. ICCAT, 79(2): 705-714.