

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, 24 January 2024

ICCAT GBYP CIRCULAR # G-00062/2024

SUBJECT: CALL FOR TENDERS ICCAT GBYP 01/2024 – MODEL-BASED SAMPLING DESIGN FOR EASTERN BLUEFIN TUNA CLOSE-KIN MARK RECAPTURE - ATLANTIC-WIDE RESEARCH PROGRAMME FOR BLUEFIN TUNA (ICCAT GBYP – PHASE 13)

I should like to transmit the Call for Tenders ICCAT-GBYP 01/2024 – Model-Based Sampling Design for Eastern Bluefin Tuna Close-Kin Mark Recapture - Atlantic-Wide Research Programme for Bluefin Tuna.

I would be grateful if you could distribute this Call for Tenders to qualified people and institutions that may be interested.

Please accept the assurances of my highest consideration

Executive Secretary

Camille Jean Pierre Manel

DISTRIBUTION:

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Attachment: Call for Tenders ICCAT-GBYP 01/2024.



Call for Tenders ICCAT GBYP 01/2024
Model-based sampling design for eastern bluefin tuna close-kin mark recapture
Atlantic-wide Research Programme for Bluefin Tuna
(ICCAT GBYP – Phase 13)

Background and objectives

A GBYP Workshop on Bluefin Tuna Close-Kin Mark Recapture (CKMR) was conducted on 14-16 March 2023 to analyze relevant factors for the implementation of the approach in the eastern Atlantic and Mediterranean bluefin tuna stock, with the goal of presenting a feasibility study, including a workplan with cost estimations to the SCRS in September 2024. Sampling opportunities for eastern Atlantic bluefin tuna stock (BFT-A) close kin mark-recapture (CKMR) implementation were discussed considering current knowledge of BFT-A reproduction and population structure, as well as logistic possibilities for sampling of larvae, juveniles and adults in different candidate areas within the Mediterranean Sea and from the different Atlantic fisheries.

Future steps required for the implementation of CKMR in the eastern BFT-A stock were recommended, including a modelling study to develop the abundance estimation equations and inform sampling-design decisions. In CKMR the probabilities of finding Parent-Offspring Pairs (POPs) and Half-Siblings Pairs (HSPs) in samples of juveniles and adults become more complicated when there is population structuring and individuals cannot be sampled randomly from the population. The main goal of the modelling study would be to develop a "basic" spatial-CKMR-model for eastern BFT-A, with an ability to represent alternative hypotheses about stock structure and spatial dynamics, and to use it for CKMR sampling design calculations.

The recommendation from the workshop was to start with a "fairly simple set of hypotheses about spatial structure, within which the number of parameters would be small enough to allow reliable estimation, and to sample in such a way that any major departures from that hypothesis will eventually become clear in the data". In that vein, the working hypotheses agreed at the workshop involve:

- Three main spawning aggregations within the Mediterranean: Balearic Islands (B), central Mediterranean (C) and eastern Mediterranean (E);
- Existence of some degree of site fidelity for spawning areas;
- No differences in Atlantic Ocean migration between individuals from different areas of origin so that fully mixing of adults from different spawning areas can be assumed (at least for B and C, unfortunately there is not enough data from E) for samples taken in the Atlantic.

Consequently, this Call for Tenders is launched, for public or private entities, for the submission of the proposals to carry out the project, detailed in the following paragraphs.

Contractor tasks

1. Develop a population dynamics model for the three main Mediterranean Sea spawning groups (subpopulations), that can represent alternative hypotheses about site fidelity, stock mixing within the Mediterranean and in the Atlantic, and differential fishing mortality among subpopulations;
2. Specify probabilities of POPs and HSPs, conditional on each of the specific hypotheses outlined under item 1;
3. Use the spatial model as an operating model to evaluate the performance of alternative multi-year sampling schemes for POPs and HSPs, suggesting options for the type and number of samples to be collected from different geographic areas/fisheries;
4. Use the spatial model to explore how the data might reveal departures from "baseline" hypotheses made for item 3; for example, that two or three of the subpopulations are fully mixed in the Atlantic and that there is spawning site fidelity.



COMISION INTERNACIONAL PARA LA
CONSERVACION DEL ATUN ATLANTICO

In the case that an extension of the GBYP Phase 13 Grant until 31 July 2024 be signed with the EU, the Contractor would be requested to carry out the following further task, extending the deadline and the budget of the contract accordingly.

5. Collaborate with the BFT Technical Sub-group on CKMR, which will be coordinating the complete feasibility study that will integrate results and information on epigenetic ageing, genetic techniques, logistic considerations, costs, etc.

Deliverables

#1 Draft final report to be presented at the latest by **8 April 2024**, containing the detailed description of the complete work carried out and the results of the analyses, which will be presented and discussed at the Intersessional Meeting of the Bluefin Tuna Species Group, **15-18 April 2024**.

#2 Final report, including the definitive version of the report detailed in the previous point, prepared taking into account any comments provided by ICCAT, shall be submitted by **24 April 2024**. It will finally be integrated with other sources of information in the report of the complete feasibility study, to be presented at the Meeting of the SCRS Bluefin Tuna Species Group (16-21 September 2024).

#3 Codes – TMB and R code developed for the analysis shall be submitted by **24 April 2024**.

In the case that an extension of GBYP Phase 13 Grant until 31 July 2024 be signed with the EU, the Contractor would be requested to present a new deliverable, comprising an Addendum to the final report containing an activity report describing the work carried out in relation to Task 5 listed in the Section b) Contractors Tasks, which would be presented one week prior to the new agreed end date of the contract fixed in the contract amendment that will be signed to this end.

Request for bids

Interested entities should submit an offer to the ICCAT Executive Secretary (camille.manel@iccat.int), with copy to Ms. Ana Martinez (ana.martinez@iccat.int) by **15 February 2024**, including:

- a) The detailed offer with a description of methodology to be used;
- b) A short presentation of the entity responding to this Call for Tenders, including any documented expertise/experience in the field;
- c) The curricula of the scientific staff, including any documented expertise/experience in the field;
- d) Detailed budget proposal;
- e) Name, address, and telephone number of the tendering body;
- f) 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 Call for Tenders; and
- h) Statement specifying the extent of agreement with all terms, conditions, and provisions herein included.

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.

The ICCAT Secretariat will make a selection of the offers and will decide to which entity the contract should be awarded.



Duration of the contract

The work under this contract shall be concluded by **30 April 2024**.

Payment details

Disbursements will be made according to the following schedule:

- 1) 50% 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 signature of the contract.
- 2) 50% after the approval of the final report, the submission of the code (**Deliverables #3 and #4**) and after receiving a regular invoice. The Contractor shall submit this revised final document (if changes are requested) together with the regular invoice, by **24 April 2024** at the latest.

Logistics

The text report shall be in MS Word or compatible software, tables must be in Excel format or compatible, figures and pictures must be in JPEG or TIFF format or compatible. All documents submitted must be in English.

Copyright

All of the material produced by the Contractor will remain the property of GBYP and it must be kept confidential.

For further information concerning this Call for Tenders, please contact the GBYP Coordinator at the following address: francisco.alemany@iccat.int.