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, 29 April 2024

ICCAT GBYP CIRCULAR # G-00262/2024

SUBJECT: CALL FOR TENDERS – AERIAL SURVEY FOR THE MONITORING OF BLUEFIN TUNA SPAWNING AGGREGATIONS IN THE MEDITERRANEAN SEA (ICCAT GBYP PHASE 14)

I should like to transmit the Call for Tenders - Aerial survey for the monitoring of bluefin tuna spawning aggregations in the Mediterranean Sea, under the Atlantic-Wide Research Programme for Bluefin Tuna (GBYP Phase 14).

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

Please accept the assurances of my highest consideration

Executive Secretary

Camille Jean Pierre Manel

DISTRIBUTION:

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- **Cooperating Parties, Entities or Fishing Entities**

Attachment: Terms of Reference for the Call for Tenders including area survey sampling design and budget.

Terms of Reference

Aerial survey for the monitoring of bluefin tuna spawning aggregations in the Mediterranean Sea (ICCAT GBYP Phase 14)

GBYP aerial surveys objectives and background

The main objectives of the ICCAT Atlantic-Wide Bluefin Tuna Research Programme (GBYP) are to improve: (a) the understanding of key biological and ecological processes, (b) current assessment methodology, (c) the management procedures, and (d) advice.

Key tasks are to reduce uncertainty in stock assessment and to provide robust management advice. This requires improved knowledge of key biological processes and parameters. Currently almost all the data used in stock assessments are obtained from fisheries-dependent data, which can be affected by changes in exploitation patterns and TACs. It is therefore important to obtain data from alternative sources, such as fishery independent indices, in order to verify the assumptions made when conducting the assessments or to improve the current data sets used in OM or MSE.

Therefore, one of the major research tasks under the ICCAT Atlantic-Wide Research Programme for Bluefin Tuna (GBYP) has been the aerial survey for spawning aggregations (AS), which has already been carried since 2010 (all documents are available here), aiming to provide a fishery-independent index of relative abundance of spawning stock biomass.

The GBYP AS has faced numerous logistical challenges, which have resulted in changes in survey design and data processing to standardize methodologies and improve the accuracy of the index. Consequently, a new in-depth revision of the whole GBYP AS program was carried out in 2020 by two external experts (Vølstad, 2020 and Buckland, 2020) who detected some inconsistencies in the currently available AS index time series and presented several recommendations for its improvement, which were considered by the SCRS Bluefin Tuna Species Group. One of these recommendations was to start moving to digital observing and counting systems to substitute human observers-based system, and another was to extend, if possible, the surveyed areas. In addition, in 2021 a global reanalysis of the whole time series was carried out to further refine the database and generate an improved index time series based on fully standardized analytical procedures. In 2021, a pilot aerial survey was carried out in the Balearic Sea area, covering both the usual core area and an extended area around it, aiming at evaluating the feasibility of using digital systems for the monitoring of BFT spawning aggregations and its accuracy and precision, as compared to the classic human observers-based system.

Despite the positive preliminary results from the pilot survey due to logistic constraints and available budget, the GBYP Steering Committee (SC) decided to resume the aerial survey for bluefin tuna spawning aggregations in the core areas of the Western and Central Mediterranean Sea in 2023, following the classic human observers-based system. The three sub-areas to be surveyed were the following: Balearic Sea (Area A), Southern Tyrrhenian Sea (Area C) and Central-southern Mediterranean Sea (Area E).

To keep the time series of this aerial index, which is one of the indices used for the evaluation of the eastern BFT stock within the framework of the new management system based on the MSE approach, the GBYP SC has decided to develop new surveys in the same areas and following the same methodology as in the 2022 and 2023 campaigns.

Consequently, this Call for Tenders is launched, for public or private entities, be they scientific institutions or interested companies, for the submission of proposals to carry out the full project, detailed below.

Funds are going to be made available under GBYP Phase 14.

Contractor tasks

The Contractor will work in close consultation with the ICCAT GBYP Coordinator and the GBYP Steering Committee and, if required by GBYP, on the advice of an expert nominated by GBYP, who could participate some days during the survey as an onboard scientific observer, substituting one of the scientific observers hired by the company. The Contractor will conduct aerial surveys in one or more sub-areas covering the spawning aggregations, identified in the attached maps, according to the sampling design attached (**Attachment 1**). The three sub-areas to be surveyed are the following: Balearic Sea (Area A), Southern Tyrrhenian Sea (Area C) and Central-southern Mediterranean Sea (Area E). The Contractor is responsible for obtaining the flight permits.

The Contractor will develop a pilot aerial survey targeting BFT spawning aggregations following classic visual observations and the sampling strategy defined in the attached files, where the coordinates of several series of replicas of transects are defined. The operational budget for these pilot campaigns is sufficient for several replicates according to the survey design. The objective is to get four replicates in each area, and unless "force majeure" reasons concur, the minimum number of complete replicates by area will be three.

The survey will be conducted in the period from the end of May to the beginning of July 2024. The spotting altitude will be 300 m. The distance covered in a one-hour flight should be about 100 nm, with about 6 on-duty flight hours per day. It is reasonable to take into account adverse weather forecasts for 20% of the days (bad weather conditions mean winds over 3 on the Beaufort scale, or low clouds at less than 300 m altitude, or heavy rain, which prevent reliable observation of tuna schools close to the sea surface). It is mandatory to apply the aerial survey protocol.

The offer is to specify the following: (a) type of aircraft (adequate for aerial spotting, possibly with upper wings, two propellers and good forward visibility, mandatorily equipped with bubble windows, one on each side); (b) availability of a pilot and a professional tuna spotter; (c) availability of two scientific spotters, belonging to scientific institutions that are independent from the fishing industries; (d) survey time provided for each replica.

The Contractor will provide a full GPS recording of all flights and sighting positions, together with the necessary way points when relevant. All sightings will also be documented with photos, preferably using a high resolution, geo-stabilised, GPS tagging, electronic camera. All photos will be delivered along with the final report.

The Contractor will provide the sightings forms from visual observations to ICCAT GBYP, duly filled, at the end of each week (24 hours maximum after the last flight), in order to allow for real-time checks and corrections.

The awarded Contractor will ensure the participation of one official representative, the pilot(s), the professional spotter(s) and the scientific spotters in an online training course (1 day) to be held prior to the starting of field operations, possibly at short notice. Participation in the course is mandatory. The Contractor will provide photos and the personal details of all the staff working on the survey before the training course.

Contractor minimum qualifications

- Documented multi-year experience in bluefin tuna studies and/or aerial surveys or censuses of marine populations; previous experience in tuna aerial survey is preferred.
- Availability of an adequate aircraft for aerial spotting, including a technical description of the aircraft equipped with two bubble windows (one on each side) piloted by a licensed pilot having documented experience in this field.

- Availability of at least one professional tuna spotter, who has documented multiyear experience in this field.
- Availability of at least two scientific observers, preferably with previous experience in tuna fisheries or biology, aerial surveys and/or census of marine populations, and who pertain to scientific institutions or entities independent of the fishing industries and who hold a university degree in one of the following: Fisheries Science, or Marine Biology or Natural Sciences or Biological Sciences or Environmental Sciences or closely related fields.
- Excellent working knowledge of one of the three official languages of ICCAT (English, French and Spanish). A good command of English is highly desirable.
- Bank or Insurance guarantee for the amount of the contract, to be provided before signature of the contract.

Request for bids

Interested entities **should submit an offer only** to the ICCAT Executive Secretary (camille.manel@iccat.int), with copy to Ms. Stasa Tensek (stasa.tensek@iccat.int) by **13 May 2024 (18:00h Madrid time)** including:

a) A detailed offer, describing the sub area(s) where the aerial survey will be carried out, the type of spotting aircraft to be used for the survey, the minimum number of flight hours to be guaranteed in total, the maximum number of stand-by days, the date for the interim report and the date for the final report;

b) The curricula of the pilot, the professional spotter and the scientific observers;

c) The curriculum of the institution or company applying for the GBYP Pilot Aerial Survey 2024, with any documented experience in aerial survey or marine population survey, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information);

d) A detailed estimated budget for the aerial survey, specifying the cost, including number of working days, to cover four replicates, according to the attached table (**Attachment 2**);

e) The name, address, VAT/tax number and telephone number of the tendering body, along with the contact number of the person responsible for field activity;

f) The institutional and administrative background of the tendering body (e.g. statutes, type of institution, annual budget, budget control procedures, etc.);

g) If the aircraft proposed for the survey does not belong to the tendering body, then a declaration from its owner should be included, to define the availability of the aircraft for this duty and to ensure that the aircraft is properly insured for all risks by a primary insurance company; a copy of the subcontract or MOU should be also provided;

h) A detailed list of any subcontracting activities. Subcontracts can be allowed up to a maximum of 40% of the budget;

i) The declaration that the offering institution will strictly follow the aerial survey design and the protocol provided by ICCAT GBYP prior to the beginning of the surveys, along with the forms to be used for the survey, and the administrative rules specified in the contract;

j) A declaration that all the comments eventually made on the draft final report will be incorporated in the final report;

k) A completed copy of the operating license and authorization (if applicable) and any administrative document, released by the competent public authority, demonstrating that the offering institution is authorized to operate the aerial survey;

l) A declaration that the offering institution will provide an insurance guarantee for the full amount of the contract, before its signature;

m) A declaration that the offering institution will be covered by full insurance for the aerial survey to be carried out according to the Call for tenders, excluding ICCAT from all liability concerning the work to be carried out by each offering institution;

n) Acknowledgment of this Call for tenders;

o) A statement specifying the extent of agreement with all terms, conditions, and provisions herein included.

Offers that fail to furnish the required documentation or information or reject the terms and conditions of the Call for tenders may be excluded from consideration.

Contractors can be either research institutions such as government or private laboratories, universities, or private consultancy firms or other entities having the required qualifications.

The Contractor will be available to report to any meeting requested by ICCAT.

The Contractor will take onboard an expert scientific observer appointed by ICCAT GBYP at any time, at short notice.

The ICCAT Secretariat will make a selection of the offers and will decide the contract to be awarded. The awarded entity will be notified shortly afterwards.

Deliverables

1. The sighting forms concerning the first week of activities to be submitted by e-mail the day after the first week of operations, at the latest, with the GPS tracks (electronic) and brief notes on specific problems.

2. The sighting forms concerning the second week of activities to be submitted by e-mail the day after the second week of operations, at the latest, with the GPS tracks (electronic) and brief notes on specific problems.

3. The sighting forms concerning the third week of activities to be submitted by e-mail the day after the third week of operations, at the latest, with the GPS tracks (electronic) and brief notes on specific problems.

4. The sighting forms concerning the fourth week of activities to be submitted by e-mail the day after the fourth week of operations, at the latest, with the GPS tracks (electronic) and brief notes on specific problems.

5. The sighting forms concerning the fifth week of activities to be submitted by e-mail the day after the fifth week of operations, at the latest, with the GPS tracks (electronic) and brief notes on specific problems.

6. The draft final report to be submitted at the latest by **10 July 2024**, including:

   a) Full description of the work carried out during the aerial survey;

   b) Detailed description of the methodology;

   c) Detailed maps of the areas in which the aerial survey was carried out, according to the aerial survey design;

   d) Maps with the GPS tracks of the survey, by date;

   e) Detailed maps of the sightings, with GPS positions;

   f) Full copy of the official sighting forms, complete with full details;

   g) Complete copy of the photos and videos of visual observations taken during the survey (on appropriate digital storage medium), including their reference;

   h) Scientific report, prepared taking into account the aerial survey design and the relevant literature;

   i) Summary;

   j) A Power point presentation of the main results.

7. The definitive final report, to be prepared taking into account the eventual comments provided by ICCAT, and the full administrative report including copies of all administrative documents, to be submitted by **24 July 2024**, at the latest.

Payment details

Disbursements will be made according to the following schedule:

1. 40% of the total amount of the contract upon signing of the contract;
2. 40% upon providing Deliverable No. 5;
3. 20% after approval of the final report upon incorporation of comments made by ICCAT and approval of the administrative documents.

Selection of proposals

The ICCAT Secretariat will review 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. The 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 (30%); ii) proven track record (30%); iii) technical merit based on workplan (30%); and iv) flexibility as regards future changes in requirements (10%).

Logistics

All documents provided by the Contractor must 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, French or Spanish.

Copyright

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

References

Buckland S.T. 2020. Independent peer review of the revision of GBYP aerial survey design, implementation and statistical analyses (ICCAT GBYP 12/2020) of the Atlantic-wide research programme for bluefin tuna (ICCAT GBYP Phase 10). Collect. Vol. Sci, Paps. ICCAT 77(2): 977-987.

Vølstad J.H. 2020. Review of the revision of GBYP aerial survey design, implementation and statistical analyses (ICCAT GBYP 12/2020) of the Atlantic-wide research programme for bluefin tuna (ICCAT GBYP Phase 10). Collect. Vol. Sci, Paps. ICCAT 77(2): 988-1005.