



Madrid, 9 June 2017

ICCAT GBYP CIRCULAR # 925/ 17

**SUBJECT: CALL FOR TENDERS – ICCAT GBYP 08/2017
BIOLOGICAL STUDIES
ATLANTIC-WIDE RESEARCH PROGRAMME ON BLUEFIN TUNA
(ICCAT GBYP – PHASE 7)**

I have the honour to transmit to you the attached Call for Tenders – ICCAT GBYP 08/2017 - biological studies Atlantic-wide Research Programme on Bluefin Tuna (ICCAT GBYP – Phase 7)

Please accept the assurances of my highest consideration.


Driss Meski
Executive Secretary



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Attachment: Call for Tenders GBYP 08/2017.

CALL FOR TENDERS ICCAT GBYP 08/2017
BIOLOGICAL STUDIES
ATLANTIC-WIDE RESEARCH PROGRAMME ON BLUEFIN TUNA
(ICCAT GBYP – PHASE 7)

ICCAT GBYP Background and objectives

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. However, currently almost all the data used in stock assessments are obtained from the fisheries-dependent data. It is therefore important to obtain data from alternative sources, in order to verify the assumptions made when conducting the assessments.

This Call for Tenders concerns one of the main activities to be carried out in Phase 7 (2017-February 2018): the Biological Studies.

BIOLOGICAL STUDIES (ICCAT GBYP 08/2017)
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Background and objectives

One of the main objectives of the ICCAT GBYP is to improve the understanding of key biological and ecological processes for Atlantic bluefin tuna. As part of this Programme, biological sampling of the main bluefin fisheries (i.e. baitboat, purse seine, longline, handline, traps and recreational fisheries) already started in 2011 and these samples were already partly analysed and the remainder are stored in the ICCAT GBYP tissue bank.

Additional samples will be collected separately in farms (adult fish) and, opportunistically, by the ICCAT ROP and tagging teams in GBYP Phase 7.

According to the recommendations provided by the SCRS and the GBYP Steering Committee, ICCAT GBYP Phase 7 objectives include further samplings, additional and more focused micro-chemical and genetic analyses, aging of YOY and other studies aiming to fill knowledge gaps in bluefin tuna reproductive biology in the NW Atlantic (Slope Sea and surroundings).

As part of this Programme, scientific institutes and/or public or private entities are asked to submit tenders to carry out the entire project or its single component.

Contractor tasks

The tenderer will work in close consultation with the ICCAT GBYP coordination team. Samplings shall follow the [Sampling Design](#) taking into account the modifications reported in the [updated table](#). However, any change or adjustment to these could be possible if fully justified and agreed (for example, the proposed sampling levels are based on size information, which are not necessarily appropriate for sampling across all the different biological material). Also, duplication (i.e. of existing sampling programs) must be carefully avoided.

The analyses will mostly follow the [methodologies](#) already established in previous Phases.

Although ICCAT Recommendation 11-06 provides the means to ensure better conditions while carrying out biological and genetic sampling activities in international waters and those under jurisdiction of coastal States, most of which are ICCAT CPCs, the Tenderer will be responsible for all necessary agreements with local authorities, local fishermen and industries when carrying out sampling within national jurisdictions. The biological samples collected and/or analyzed will be property of the ICCAT at the end of the contract.

The tenderer(s) shall provide proposal(s) for the provision of the following services:

Maintenance and management of the ICCAT GBYP tissue bank:

- a) Provide appropriate storage for any biological samples and hard parts collected so far (about 8,300 otoliths, 10,500 spines and 12,300 tissue samples at the date of the Call), following the system already adopted. The tenderer shall also ensure the correct storage of all samples that will be collected under the present Call and those additional samples that will be collected in farms (up to 1,200 otoliths and 1,200 tissue samples) and, in an opportunistic way, by the ICCAT ROPs (estimated at some hundreds of tissue samples) and possibly also by the tagging teams (estimated at about one hundred tissue samples). The management shall also include the delivery of the necessary samples to the entities in charge of the analyses. If one of the tenderers is the same entity that was engaged in previous Phases, it shall provide at the beginning of the contract a full detailed catalogue of all samples available in the GBYP tissue bank, including all residuals from previous Phases; the catalogue shall be detailed by stratum and size classes and shall be updated at the end of the contract.

Sampling:

- b) Specification of the biological data and samples to be collected; i.e. otoliths, other hard parts, tissue samples, sex ID, etc., by strata and size class including a clear prioritization under the budget. Special emphasis should be placed on collecting otoliths and spines for size classes and strata that had been under-represented in the samples from previous years, with a goal of collecting at least 10 samples for each 10 cm length class and stratum. Special focus should be devoted to collecting biological samples and otoliths from fish of age 0, with a target of 200/250 samples for each of the main spawning areas in the Mediterranean Sea (Balearic area, southern Tyrrhenian Sea, southern central Mediterranean Sea and Levantine Sea) plus from additional areas where age 0 specimens might be found, and for collecting tissue samples and otoliths from adult fish in the Levantine Sea (eastern Mediterranean Sea). The sampling priorities are detailed in the [updated table](#).

If necessary, the tenderer(s) could update the Protocols for the biological and genetic sampling and the analyses to be conducted (e.g. individual weight and length should always be recorded for all samples); the current protocol is available [here](#). These protocols shall provide the opportunity for carrying out several analyses on the same otolith (e.g. ageing and elemental composition), optimizing at the best the collection efforts.

Analyses:

- c) Microchemistry analyses on otoliths for stable isotopes, following internationally agreed techniques, for measuring carbon and oxygen stable isotopic ratios and defining the nursery origin of each fish. Furthermore, the otoliths will be analysed on longitudinal sections for an oxygen isotope ($\delta^{18}O$), for detecting the life history of each specimen and the results will be compared and interpreted as potential age-specific movements among different water masses (in and out of the Mediterranean Sea), in light of the improved knowledge about the life cycle of Mediterranean bluefin tuna.
- d) The genetic analyses taking advantage of the improvements obtained in previous Phases, to be carried out using several tissues (muscle, fins, spines/vertebra); bluefin tuna samples from the Atlantic Ocean (excluding the Gulf of Mexico and the Mediterranean Sea) will also be the specific target of the analyses in Phase 7. The genetic methodologies will also be, besides RAD-seq and SNPs, the Transcriptome Sequencing (TS) and the Reduced Representation Sequencing and Genotyping (RRSG). Some additional genetic analyses (analysis of transcriptomic and genomic data exploiting previous available data for defining the genomic variability of the species, and experimental trials for genetic sex determination) are required in Phase 7.
- e) Ageing shall be limited to fish of age 0, and only to those YOY samples collected in Phase 6 for which the SCRS requested the daily rings reading.

For the provision of the analysis of items c) to e) the tender must include a summary table with the type and number of analyses that will be conducted on the samples collected or already stored (specifically including the samples previously collected in Norway), and their respective cost per analysis.

- f) A comprehensive objective study of the genetic and micro-chemical analyses already conducted within ICCAT GBYP (including Phase 7), to provide a complete set of plausible hypotheses about stock structure consistent with the data for the MSE operational model. Particular attention shall be devoted to those samples which are not clearly identified as WBFT or EBFT. The study shall strictly follow the reference areas in agreement with the scheme of the [updated table](#). This study shall be made in strict coordination with the ICCAT GBYP coordination team.

Special research activity:

- g) Studies for trying to fill knowledge gaps in bluefin tuna reproductive biology in the NW Atlantic (i.e. the Slope Sea and surroundings). Even though these studies may possibly be extended in time, the proposal, even if partial, shall fit the time-frame set by this Call.

The Tenderer(s) should endeavor to ensure full coverage of all sampling strata (considering what is specified above) and analyses of the maximum possible number of samples. Proposals covering one or more points from a) to g) can be submitted; therefore, the tenderer(s) can optionally apply for all or several tasks or for a specific task or sub-set of sampling areas. The tenderer(s) shall also clearly identify availability for the scientific staff to participate to any ICCAT GBYP Operational Meeting on short notice. In the case of a Consortium or group of entities, an administrative and a scientific responsible entity should be identified, along with a Scientific Committee on which each entity carrying out a scientific duty will be represented by a scientist.

Contractor minimum qualifications

- Documented multi-year experience in tuna biological studies (preferably bluefin tuna); previous experience in large-scale biological sampling.
- For the micro-chemical analysis specialist(s): documented multi-year experience of micro-chemical analysis; previous studies on tuna species will be preferential.
- For the genetic specialist(s): documented multi-year experience of genetic analysis; previous studies on tuna species will be preferential.
- Availability of sufficient qualified scientific staff to carry out the duties.
- Availability of at least one specialist in managing biological databases.
- Excellent working knowledge of one of the three official languages of ICCAT (English, French, Spanish). A high level of knowledge of English is highly desirable.

Request for bids

Interested entities should submit an offer to the ICCAT Executive Secretary (driss.meski@iccat.int) by **27 June 2017**, including:

- a) The detailed offer covering one or more points from a) to g) as detailed above.
- b) The curricula of the scientific staff.
- c) The curriculum of the institution(s) or entity(ies) applying for the ICCAT GBYP Biological studies for Phase 7, with any documented experience in these fields, including 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) The preliminary estimated budget for collection of the samples, the analyses, tissue bank maintenance and management or for research activity, to be detailed by individual task and subtask. Additionally, the budget shall be broken down by these components: personnel costs, overhead, travel, consumables, equipment and subcontracts. Overhead to cover administrative and general costs could be admitted within a maximum limit of 10% of the personnel costs, while subcontracts can be allowed up to a maximum of 40% of the budget. Any discount terms shall be clearly mentioned.
- 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.).
- g) A detailed list of any subcontracting activities.
- h) A declaration that the offering institution will follow the Scheme for the [Sampling Design](#) provided by ICCAT GBYP as improved by the [updated table](#), along with the present Call for Tenders, the [GBYP Steering Committee Recommendations](#), and/or approved modifications agreed upon, and the administrative rules specified in the contract.
- i) A declaration that all the comments eventually made on the draft final report (**Deliverable #4**) will be incorporated in the final report (**Deliverable #5**) prior to the submission to the ICCAT SCRS.
- j) A declaration that the staff and all the subcontract staff will be covered by a full insurance for the sampling activities and the laboratory work to be carried out according to the Call for Tenders, excluding ICCAT from all the responsibilities concerning the work to be carried out by each offering institution.
- k) Acknowledgment of this Call for Tenders (if applicable) (**ICCAT GBYP 08/2017**).
- l) A statement specifying the extent of agreement with all terms, conditions, and provisions included herein.

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 qualifications required.

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

The Contractor shall be available for any ICCAT GBYP inspector at any time, on short notice.

The ICCAT Secretariat will make a selection of the offers and will decide the contract(s) to be awarded.

Deliverables

- #1** A short report on sampling or research activities, including all protocols for samplings and the analyses (for those tasks only), including the description of the work carried out up to that date, to be submitted at the latest 30 days after the signature of the contract.
- #2** An update of the short report on the sampling and analyses activities (for those tasks only) or on the activity to be submitted at the latest by **20 September 2017**, including the description of the work carried out up to that date and a short PowerPoint presentation, to be used also for informing the SCRS.
- #3** Another short report for further updating the previous reports, with information on the sampling and analyses (for those tasks only) carried out until late October 2017, to be provided by **7 November 2017**, to be used for informing the ICCAT Commission.
- #4** A draft final report to be submitted at the latest by **31 January 2018**, including:

- I. The scientific report, taking into account relevant scientific literature, containing:
 - a) A full description of the work carried out during the biological studies;
 - b) A detailed description of the methodology and protocols (only for sampling and analyses activities);
 - c) Maps of the areas in which the sampling or the research was carried out, in accordance with the biological sampling strata or the proposal;
 - d) Detailed tables with the definitive number of samples by stratum, fishery, size class and type, with the related statistical analysis (for those activities) or tables showing the results of the field research activities;
 - e) A detailed description of the analysis carried out and of the results achieved (for these tasks only);
 - f) The detailed and updated catalogue of samples stored in the ICCAT GBYP Tissue Bank; link(s) with the ICCAT Secretariat database (if available) (for this task only);
 - g) An Executive Summary of the final report.
- II. An updated PowerPoint presentation of the main results.

#5 The final report, to be prepared taking into account any comments provided by ICCAT, and the full administrative report including copies of all the administrative documents, and to be submitted by **15 February 2018**, at the latest.

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**;
2. 25% upon completion and acceptance of **Deliverable #1**;
3. 25% upon completion and acceptance of **Deliverable #2**;
4. 20% after the approval of the final report (**Deliverable #5**) upon incorporation of comments by the ICCAT GBYP and the approval of the administrative documents.

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. The format of the data bank shall be agreed with the ICCAT Secretariat. 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 it must be kept confidential.

For further information concerning this Call for Tenders, please contact the ICCAT GBYP Coordinator at the following address: **antonio.dinatale@iccat.int**.