



Madrid – March 15, 2011

ICCAT CIRCULAR # 954 / 2011

**SUBJECT: TERMS OF REFERENCE – CALL FOR TENDERS – GBYP 04/2011
STOCK ASSESSMENT MODELLING (ICCAT/GBYP Phase 2 – 2011)**

I have the honor to transmit to you the attached the Terms of Reference - Call for Tenders GBYP 04/2011 for “Stock Assessment Modelling” of the ICCAT Atlantic-Wide Research Programme on Bluefin Tuna (GBYP).

This information has been translated to French and Spanish by the ICCAT Secretariat.

Please accept the assurances of my highest consideration.



Driss Meski
ICCAT Executive Secretary

Commission Officers (English):

Commission Chairman: F. Hazin
SCRS: J. Santiago
Compliance: C. Rogers
PWG: R. Lent
STACFAD: S. Lapointe

Head Delegates (English):

Albania	A. Luki	Namibia	M. Maurihungirire
Barbados	S. Willoughby	Nigeria	F. F. Adeyemi
Belize	B. Wade	Norway	S. Holst
Brazil	F. Pitalunga	Philippines	G. A. Adora
Canada	F. Scattolon	Russia	M. Khlopnikov
China	X. Liu	Sierra Leone	A. Bangura
Croatia	J. Suic	South Africa	J. Augustyn
EU	P. Amilhat	St. Vincent & the Grenadines	R. Ryan
Egypt	M. Osman	Syria	Z. El Deen
Ghana	S. Quatey	Trinidad-Tobago	C. Chan A Shing
Iceland	B. Benediktsdóttir	Turkey	V. Kürüm
Japan	M. Miyahara	UK (OT)	J. Jansen
Korea	Jang Woo Seo	USA	R. Smith
Libya	H.A. Marai	Vanuatu	M. Amos

cc: Head Scientists

Cooperating Parties, Entities, or Fishing Entities (English):

Chinese Taipei H. Y. Huang
Guyana D. Permaul
Curaçao S. Mambi

Attachments: Terms of Reference – Call for Tenders GBYP 04/2011

TERMS OF REFERENCE - CALL FOR TENDERS – GBYP 04/2011

Stock Assessment Modelling

ATLANTIC-WIDE RESEARCH PROGRAMME ON BLUEFIN TUNA (ICCAT/GBYP Phase 2 – 2011)

Background and objectives

The objectives of the comprehensive ICCAT Atlantic-Wide Research Programme on Bluefin Tuna (GBYP) are to improve data collection, knowledge of key biological and ecological processes, assessment models and management.

An important element of the programme is to develop a robust advice framework consistent with the Precautionary Approach. This requires the development of new stock assessment methods that take into account the main sources of uncertainty and utilise the new data sets and knowledge provided by the GBYP. New data sets include, for example, historic catch and effort data, aerial surveys of spawning aggregations and tagging of juveniles. In order to evaluate novel approaches, the SCRS is developing a Management Strategy Evaluation (MSE) framework that includes a simulation or Operating Model. This will allow current and alternative assessment and advice frameworks to be evaluated with respect to their ability to meet multiple management objectives.

Two lots are offered for tender by scientific institutes and public or private entities, three contracts will be awarded each up to a value of €10,000.

Lot 1: Risk Assessment (one contract)

Although several sources of uncertainty were considered when formulating the East Atlantic and Mediterranean bluefin recovery plan, not all sources of uncertainty were explicitly considered. Therefore a contract for a **Risk Assessment** to identify and provide a preliminary quantification of the main sources of uncertainty is offered for tender. This, following consultation with stakeholders, will allow appropriate scenarios to be specified for use in the Operating Model when evaluating the alternative advice frameworks.

Risk Assessment is the formal process of managing risk where risk are identified, assessed, prioritised and managed in order to ensure that management objectives are likely to be achieved. The BFT rebuilding plan is based on stochastic projections that considered a range of uncertainties. However the SCRS stated that “*the Commission might consider a probability of rebuilding standard different from that envisaged considering the unquantified uncertainties*”. This implicitly accepts that the projections did not capture all the uncertainty associated with the assessment and management of the stock and that the probabilities predicted by the projection are likely to be more optimistic than those that will be achieved in reality. However, the unquantified sources of uncertainty were not explicitly identified nor were the associated risks and their impact on achieving the management objectives evaluated.

Therefore, the Contractor, in consultation with stakeholders, must identify the main risks and provide a preliminary quantification of their relative importance. These would allow the SCRS and the GBYP Steering Committee to prioritize research and for managers to evaluate the benefits of alternative management options with a cost effective way goal.

Lot 2: Alternative Advice Frameworks (two contracts concerning two different proposals)

Two contracts will be awarded to prototype alternative assessment and advice frameworks. The contracts require the implementation in software of algorithms to model data collection and analysis and the simulation of a harvest control rule (HCR) or management regulation based upon appropriate reference points.

The Contractor must propose an alternative assessment and advice framework and then implement it in software, including data collection, analysis and HCR, so that they can be integrated into the MSE framework under development by the SCRS. The software must be compatible with R (i.e. able to be called as R functions, methods, or classes) and published under an open source license such as GPL. In addition, all software must run under Windows and Linux operating systems. This will ensure transparency and allow the various elements to be

evaluated alongside alternatives that might be developed by others, e.g. within SCRS, the GBYP, or management bodies both now and in the future.

Contractors tasks common for both Lot 1 and Lot 2

Contractors will work in close consultation with the GBYP Steering Committee and the ICCAT Population Dynamics Expert.

Contractor minimum qualifications

- Experience in stock assessment and management advice.
- University degree in any of the following: Mathematics, Statistics, Engineering, Fisheries Science, Marine Biology Natural Sciences, Biological Sciences, Environmental Sciences or a closely related fields.
- Excellent working knowledge of one of the three official languages of ICCAT (English, French and Spanish). A high level of knowledge of English is highly desirable.

Request for bids

Interested entities should submit an offer to the attention of Mr. Driss Meski, the Executive Secretary of ICCAT, at the following address: driss.meski@iccat.int by **April 1, 2011**, including:

- a) A detailed offer, which shall include a description of methodology to be used.
- b) A short *Curriculum vitae* of the tender (in case of individual scientists) and of any collaborators, i.e. the 5 most relevant papers and involvement in research projects or management bodies.
- c) An estimated budget which shall not exceed €10000.
- d) The name, address, and telephone number of the tendering body.
- e) The institutional and administrative background of the tendering body (e.g.: statutes, type of institution, annual budget, budget control procedures, etc.), if applicable.
- f) A detailed list of any subcontracts.
- g) Acknowledgment of this Call for Tenders.
- h) 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 will not be considered.

The Contractor should be available to report to the Working Group on Stock Assessment Methods, the Bluefin Tuna Species Group and the SCRS; if so required reasonable expenses will be paid.

The ICCAT Secretariat will make a selection of the offers, in consultation with the ICCAT GBYP Steering Committee. Following the selection process, the ICCAT Executive Secretary will notify the entity selected for the contract by April 8, 2011.

Deliverables

Lot 1: Risk Assessment

- 1-1 A preliminary report will be submitted by **June 20, 2011** to the Population Dynamics Expert and the GBYP Coordinator one week prior to the Working Group on Stock Assessment Methods. The report will detail the methodology proposed to conduct the risk identification and assessment.
- 1-2 A final report will be submitted to the Bluefin Tuna Species Group (September 26, 2011) as an SCRS paper that summarizes the risk assessment
- 1-3 Recommendations as to future research priorities

Lot 2: Alternative Scientific Advice Frameworks

- 2-1 A preliminary report will be submitted by **June 20, 2011** to the Population Dynamics Expert and the GBYP Coordinator one week prior to the Working Group on Stock Assessment Methods. The report will detail

what data will be used how it will be analysed, how management advice will be provided and what uncertainty will be considered. In addition the software and its interface with the MSE framework must be specified.

2-2 A final report will be submitted to the Bluefin Tuna Species Group (September 26, 2011) as an SCRS paper that evaluates the performance of the advice framework. This will be based on simulated datasets provided from the MSE framework.

2-3 Software available as R routines, methods or classes with full documentation.

Evaluation

Contracts 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. Tenders 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; (iv) flexibility to future changes to requirements; and (v) contribution to the overall objectives of the GBYP.

The ICCAT Secretariat, in coordination with the GBYP Steering Committee, will examine each tender received and make recommendations as to which tender is the most economically advantageous. Once the decision to award the contract has been made, both the successful and unsuccessful tenderers will be notified. Unsuccessful tenderers may request a detailed letter explaining the reasons for the decision and the relative characteristics of their bid compared to the winning bid.

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;
- 2) 50% after the approval of the final report by the ICCAT SCRS upon incorporation of comments by the ICCAT GBYP Steering Committee.

Logistics

All documents provided by the Contractor must be in Open Office, Latex or compatible software, all documents submitted must be in English, French or Spanish.

Copyright

All software written by the Contractor will be licensed under GPL or similar open source licence. .

For information concerning this call for tenders, please contact the Program Coordinator at the following address: antonio.dinatale@iccat.int