GBYP Steering Committee Meeting

Madrid, 18-19 April 2018

The meeting of the GBYP Steering Committee (SC) was held at the ICCAT Secretariat in Madrid on 18-19 April 2018, with the participations of the SC members David Die (SCRS Chair), Gary Melvin (W-BFT Rapporteur), Ana Gordoa (E-BFT Rapporteur), Ivan Katavic (SC External Member) and Miguel Neves dos Santos (ICCAT Assistant Executive Secretary, on behalf of Driss Meski, ICCAT Executive Secretary). Francisco Alemany (GBYP Coordinator), Alfonso Pagá García (GBYP Database Specialist) and Stasa Tensek (GBYP Assistant Coordinator) joined the meeting, invited by the Steering Committee.

David Die welcomed all the participants and opened the meeting. He introduced to all participants Dr Ivan Katavic, recently appointed as external member of the Steering Committee, and welcomed him to the team.

The tentative agenda, as proposed by the GBYP Coordinator (**Annex 1**) was approved. Stasa Tensek was appointed as rapporteur.

Closure of Phase 7

The Coordinator informed the SC that the final report of the Phase 7 has already been prepared and that GBYP hasn't spent 190,000 euros that were envisaged in the budget, because some activities were cancelled (as contracts for external member of SC or modelling group communicator) or their cost was lower initially envisaged (travels of GBYP coordinator), or due to the fact that some contractors were not able to properly justify all their expenses and receive the foreseen reimbursement. Consequently, in order to prevent this latter problem, it was decided, from now on, to clearly highlight the administrative rules to be followed to all GBYP contractors before starting the work. The main research activities that were cancelled or in which the work plans were not totally accomplished because of logistical or "force majeure" causes were the measurement of pituitary gonadotropins within the framework of the biological studies to fill knowledge gaps in Bluefin tuna reproductive biology in the NW Atlantic and part of the electronic tagging activities in the North Sea.

Aerial survey

As concerns the contract for aerial survey data elaboration, it was decided that the Coordinator should try to negotiate the final amount of the contract in order to make it in line with the amount in previous years, upon the final decision on financing. Regarding the bid for aerial survey in Balearic Area, which is considerably higher than that for 2017, it was suggested that the ICCAT Executive Secretary to try to negotiate a lower amount. Given that the SC considers it is necessary to continue with the aerial survey in the forthcoming years, it is crucial to ensure that the cost of this activity remain as stable as possible, to prevent that an excessive increase of costs from year to year would hamper its funding under the limited GBYP budget. With this aim, it was recommended that the next call for tenders for aerial survey be drafted in a way that it would keep the terms of reference and consider the possibility to extend the contract for 2-3 following years. The latter would be pending on the availability of the funds in the next GBYP phases.

Modelling

Regarding the GBYP Core Modelling MSE Group, it was decided to reinforce the group with two new members: Shuya Nakatsuka (Japan) and Carmen Fernandez (EU-Spain), experts on this topic. As regards the tasks currently conducted by Tom Carruthers, the SC reiterated that his work is still necessary in this transitory process to assist stakeholders in the development of Candidate Management Procedures (CMPs) and to update the MSE software according with the recommendations of the Group and developers.

Due to the amount of pending activities in relation to MSE implementation process and the agreed work-plan, SC recommended that his contract be urgently signed.

Data recovery

With reference to the offer received by Barbara Block for providing acoustic and satellite electronic tags data under a single budget, it was decided to make a counter offer for procurement of PSAT data only, for the same unit price paid during Phase 6, given that actually GBYP is not interested in acoustic tag data since they do not provide information on mixing, which is the current priority of tagging activities. As regards to the ancient trap data, the SC recommended the closure of this activity within Phase 8. Accordingly, it was decided to make a last call for tender for recovering of this type of data in the Phase 8, in order to fill the possible gaps ICCAT has in the trap data series, with particular focus on the most recent period due to its importance for the stock assessment. In addition, it was recommended to launch a call for synthesis of all data already collected within the framework of GBYP and its usefulness in enhancing stock assessment. With respect to the ICES data, it was decided to postpone the decision until more precise information on the data already available in the ICCAT DB can be gathered. In any case this activity should be carried out by GBYP coordination team.

Biological studies

The Coordinator informed the Steering Committee about the ageing intercalibration exercise coordinated by IEO, which is currently developed outside the scope of the GBYP, but in close connection with it, since the results of the exercise will be used by the Programme in the future. It was decided that, although GBYP will not financially contribute to this exercise, it will provide technical support (e.g. cloud space for document or images interchange). It was proposed and agreed by the SC that the calibration exercise envisaged for Phase 8 under the auspices of GBYP will be carried out once finished the ongoing exercise leaded by IEO, and to be focused on the set of otoliths read last year by Fish Ageing Services in Australia, involving the experts that have generated the ALKs used up to now for BFT stocks assessment purposes.

The SC also decided that an independent reviewer is needed to study the discrepancies in eastern/western reproductive parameters. Accordingly, it was decided to initiate preliminary contacts with Dr Oshima and Dr Swanson to check their availability to conduct such study.

Regarding the other activities within biological studies, it was decided that this year the funds that will not be invested in sampling of YOY shall be used for carrying out genetical/microchemical analysis to determine the origin of fish. The quantity of samples to be analysed will depend upon the availability of funds.

As regards the test for bluefin sex recognition, it was decided to postpone the decision, once more precise information on available funds is known.

In order to establish contingency plan for GBYP Tissue Bank, the SC recommended the Coordinator to visit AZTI laboratory in order to get better insight in the current situation of the tissue bank.

Tagging

The SC recommended buying around 10 more electronic tags and deploying 60 in total in this year, in order to address the questions of migration patterns and stock mixing. In consequence, it was decided to deploy tags off Portugal, Norway and the North Sea. This should be done through a direct agreement in the case of Norway, since the only associated cost are those of tags purchase, and to launch a joint call for tenders for the other two areas. In order to get more insight on the reasons for the short tags retention, it was recommended to carry out the exercise in Portuguese trap by using two different techniques for implanting tags (tagged with a pole underwater vs. handling the fish in the water or on board). The percentage of tags to be deployed by area will be decided looking for a balance between northern and southern areas and considering the deployment costs by tag, aiming as well at ensuring the success of a comparative analysis between tagging methodologies that will be carried out in the Portuguese trap. However, the exact number of tags by area will be decided once the definitive total number of available tags, which will depend of the revision of the budget dedicated to biological studies and the capability of WildLife Computer to provide new tags in due time, will be known.

GBYP coordinator informed the SC about other expression of interest about electronic tags, from Niall O'Maoileidigh (marine Institute Newport), on behalf a Consortium including also Stanford, Acadia and Queens Belfast Universities. They asked for e-tags from GBYP to be deployed off Ireland, offering themselves to cover all the deployment costs and sharing the data with GBYP. The SC decided to reject this offer, since tagging plans for Phase 8 have been already fixed, and that in the case that additional e-tags will be available they should be used to increase the number of deployed tags in the priority areas already decided.

In addition, it was recommended to improve the tagging protocol. It was also suggested to explore the possibility, for the next phase of GBYP, of transferring the tunas tagged in Norway to empty salmon offshore cages, and keep them under observation for a couple of days, to ensure that the tagged individuals are in good shape before releasing, or recover the tags in case of decease.

In respect to the request received by IFREMER for using the RMA for the electronic tagging they are going to carry out, it was decided to accept and formalize it by signing the agreement for data sharing. It was also decided to sign the partnership with WWF for tagging in Monaco and sharing the data.

Other

Regarding the global review of GBYP activities, which is envisaged to be carried out in this Phase, it was decided that the SC will provide guidelines to the GBYP coordination team in regards to the preparatory work, which will be needed for providing the reviewers with relevant information. The SC also agreed to develop the Terms of Reference for this review.

The SC also recommended including one EU representative to future SC meetings, who would act at the beginning only as invited ex officio member. It was recommended that next steps for including one EU representative as an official member of the GBYP Steering Committee, must be discussed during the SCRS Plenary meeting for recommending it to the Commission.

ANNEX 1

Points to be addressed within 18-19th April SC Meeting

Info about closure of Phase 7:

- o Final report: Finally, all the Scientific and Administrative reports have been received and fully revised. We are only waiting for some additional justification document from one contractor and a couple of final bills, already agreed. Accountability is already closed, and the being the final balance for Phase 7 is minus 190000€ (quantity theoretically available according to Phase 7 budget but not expended). The final report for EU is already finished and will be submitted on Friday.
- o Reserves: The EU accepted our interpretation of Antonio's leaving costs, and hence we have saved almost 30000€, which will remain in the reserves. Moreover, some more countries have committed themselves to pay their pending contributions for previous phases (Korea 5415€; Algeria: 10918€), who on the other hand have committed also contributions for phase 8 that were not included in the application, which will help to rebuild the reserves. Thus, the global reserves will be probably more than 200000€, which we hope will be enough to help to cover the 20% from third parties required for phase 9.

Info about first Calls of Phase 8:

- Katavic,s contract arranged
- Aerial surveys –both training&data analysis and survey itself-: Calls already launched, bids received and evaluated. Only one offer received for training course and data analysis, which is 2750€ higher than envisaged budget. Three offers received for aerial surveys, covering all areas and not overlapping. The problem is that the envisaged money, 400000€ is not enough to cover these offers and additional 44000€ are required. This money could be available from Biological studies budget, since it will be probably lower than envisaged considering last decisions (not sampling YOY) and some misleading in budget estimation (confusion € / Aust. \$ allows to save 30000€)
- o Sampling in farms: This year will be launched as an open Call instead of invitation, only for Western and Central Med (Tyrrhenian and Southern Central) because money is not enough for covering also Levantine area). The problem is to decide on the proportions among the three areas, since it is not clear what is the proportion of spawners in each one, and on the other hands it can be variable along time.

Other pending issues:

➤ Modelling:

o MSE Core modelling Group renewal (new members as experts): the MSE group coordinator has proposed to include two experts, in addition to CPCs representatives and "ex oficio" members: Carmen Fernandez and Shuya Nakatsuka. This would allow to fund their attendance to MSE meetings in case they do not attend them as national delegates. Doug Butterworth would be the Chair, Tom Carruthers would continue as

- consultant, and ex oficio members would be: SCRS chair, Bluefin WG overall chair, Bluefin west chair, Bluefin east chair, GBYP coordinator, ICCAT MSE head. Many of these ex oficio members have changed or are going to change soon.
- Tom Carruthers contract: Further details about the conditions of this contract, as exact number of working days and daily rates, have been agreed within the last weeks. However, it is envisaged to sing the contract after a direct meeting with Tom taking advantage of his presence in Madrid on Friday

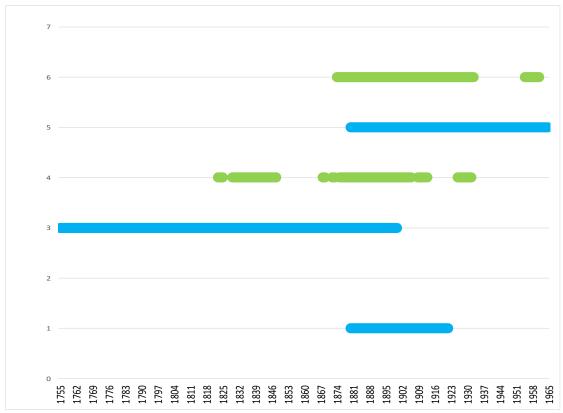
Data recovery:

Definitive offer from Barbara: 25000\$ for 50 satellite tags plus 150 acoustic tags, she does not want to provide separate budget as requested. She stresses that acoustic tags are being recaptured in European fisheries (5 returns by now); that the networks of acoustic receivers keep growing and they continue deploying new acoustic tags and that the tags in the DB are now 10 year tags. She has sent us a manuscript still unpublished based on acoustic data, in which they have been able to accurately estimate the GOM mortality rate, lower that the one used by ICCAT stock assessment models. This may indicate that the GOM population is in worse shape than it is thought. Natural mortality and fisheries mortality in the new way of ICCAT reference points is one of the more important statistics that need to be estimated, and this type of tagging enables empirical results. Barbara data are mostly concentrated in NW Atlantic, mostly quantifying only mixing between areas 4 (GSL) and 3 (WATL) but there are some records in Bahamas and even one in the Gibraltar array, which was operative on 2013

https://members.oceantrack.org/projects?sorts[collectioncode]=1

- news on ancient tuna traps data: data available for three Italian traps
 (8000€)
 - "Tonnara del Secco", near San Vito Lo Capo (Trapani, Sicily), original diaries of the family, with the daily data, plus others with a recollection of the annual production. The archives cover a huge range of years:
 - * the yearly production (number of tunas and total weight) is from 1880 to 1965, with very few holes. Several of these years were already included in the previous data report, but some quantities in some years are slightly different
 - * many years (from 1931 to 1965) were not previously available;
 - * catches with the information about the number of matanzas are available from 1930 to 1960.
 - tuna trap of Flumentorgiu, (Sardinia). The catch information goes from 1755 to 1900, but the series is interrupted in several years, particularly at the beginning but not only. The catches are by year, just in total number of tunas, but in several years it is possible to recover even the number of matanzas.

-tuna trap of Baratti (Tuscany), a trap quite often forgotten by the reports, because most of the documents have been lost for ever. Some yearly catches area available, including the by-catch species: from 1901 to 1905. Furthermore, the full list of by-catch species for the period 1880-1922 is also available.



Rodriguez-Roda/ICES data. Personal Rodriguez-Roda library, which is located now at ICCAT headquarters, have been revised. It includes, besides originals of sampling activities in traps, all the ICES reports produced by the ICES tuna group in the 60's, 70's, containing detailed tables on tuna catches and tuna length and weight sampling, even at weekly level, from many countries. First trials made by Alfonso suggest that most of this info, with minor differences, is already included in ICCAT DB, but probably aggregated by month, but in some specific cases it is not. A more detailed checking of what is exactly included in ICCAT DB is pending, because for a deeper analysis we need the help from ICCAT DB direct responsible. It should be decided if it is worth to dedicate part of GBYP team working time to compile and upload these data to ICCAT DB

Biological studies:

Support and coordination with ongoing otoliths readings intercalibration exercise leaded by Rodriguez-Marin: It is envisaged to carry out an otolith intercalibration exercise within GBYP phase 8. However, our colleague Enrique Rodriguez-Marín is already organizing a wide on line intercalibration exercise, focused on the younger age classes, which involve most of experts at worldwide level. GBYP could provide this group with some "informatic" support for file transfer and so on. In the light of

- this situation our proposal would be to wait to the end of this exercise, analyse its results, and after, in close coordination with this team, organize the envisaged GBYP otoliths reading intercalibration exercise covering all the ages and focusing on the comparison of results between the members of the aforementioned group and the new readings from Fish Ageing Australian company, which is a crucial point.
- o Reproductive biology workshop: final decision on experts for reference report, keynote speakers, final agenda and dates
 Japanese Experts: Dr. Oshimo (proposed by Ziro, who strongly supports him). Dr. Masuma maybe not so actively involved in the field study. Dr, Ashida probably less experienced.

 Western experts: Penny Swanson of the NWFSC, Seattle, Washington, appears to have one of the top exploratory research labs (salmon) in the US. The Panama lab (Margulies, Jenny Wexler) are also experts in reproduction.
- Set specific objectives for Biological Studies Calls:
 - In the light of possible budget changes regarding other activities, it should be decided what should be this year the minimum requests for biological sampling, it is to confirm that it is not necessary to sample YOY. This, according to the analysis of previous offers, would allow to save maybe up to 100000€ in relation to phase 7 sampling budget, which could be reinvested on aerial surveys, purchase of e-tags to cover new needs (if we are going to take advantage of no cost deployments offered by some institutions):
 - Decide on sex recognition test activity: we have a proposal from University of Bolonia for trying to develop this test for 25000€. The work carried out within phase 7 was in fact only a preliminary work to this end. Results are not totally guarantee, but it would be a great tool if they succeed (for knowing the sex of tagged specimens, for example)
 - Analysis YOY from Eastern Atlantic: In the last February SC meeting it was decided not to sample YOY. However, we have been informed that small YOY maybe would be available from Canary Islands. Moreover, in the tissue bank we have YOY samples collected in 2017 in the Gulf of Cadiz. Microchemical analysis of the otoliths of these individuals could confirm if they come from alternative Atlantic spawning areas or from the Mediterranean, providing new insights on the hypothetical existence of Atlantic spawning areas in Eastern Atlantic
- Visit to AZTI: To get a more precise idea about the situation of GBYP tissue bank, in relation to the requests from SC to design contingency plans, it is proposed a visit of GBYP coordinator to AZTI
- Close reproductive biology WS report

7

> Tagging:

- New EoI for e-tagging activities:
 - Ireland: Similar offer to that from Norway. "We are preparing a short report on the BFT tagging off the coast of Ireland in 2017 and are preparing the data for the ICCAT formal data submission also which you will receive in the next couple of days. In summary the consortium of Marine Institute, Stanford University, Acadia University and Queens University Belfast tagged 9 BFT with PSAT tags and three with accelerometer tags as part of Irelands national research programme. The tagging took place late September and early October. We will be running the programme again in 2018 and have 5 tags remaining. We will purchase more in 2018 but we are enquiring if ICCAT have any tags which might be made available for use in 2018? We will be covering the cost of all the tagging and logistics so if there were any extra tags available we would be happy to deploy these and provide ICCAT with all of the tagging information and data. If you could let us know we would be very happy to deploy as many tags as possible in 2018. Niall Ó Maoiléidigh, Inspector of Fisheries, Fisheries Ecosystems Advisory Services, Marine Institute"
 - WWF It: Alessandro Buzzi (Fulvio, from Univ. Genoa, involved).
 They are planning to deploy e-tags in Monaco waters. Ready to share data with GBYP. Ask for conventional tags and RMA.
 - CEFAS: David Righton. They are implementing an e tagging program around British Islands. They are ready to share info.
 Probably they will join the DTU consortium.
 - IFREMER: Tristan Rouyer. We have been contacted by Tristan, to inform us that they are going to deploy e tags within an IFREMER project, and asking for RMA. They should share the data. They are also developing a "fat logger", which will be tested at Malta farms.
- Decide on next Call/agreements (Info on new tags availability from WildLife Computers)
- o Info on conventional tagging initiatives: FIPSAS, Gemma, WWF, IFREMER
- ➤ **Coordination:** Selection of expert for GBYP global review, if confirmed it is really necessary, and define a clear roadmap.