

## Report of the Third Intersessional Meeting of Panel 1

(hybrid/Madrid, Spain, 20-22 June 2023)

### 1. Opening of the meeting

Mr Paul Bannerman (Ghana), the Chair of Panel 1, opened the meeting.

### 2. Appointment of rapporteur and meeting arrangements

Ms. Katie Plumridge (United Kingdom) was appointed as the rapporteur.

### 3. Adoption of the agenda

Several CPCs intervened to state the importance of prioritising agenda items to make the best use of time, noting the complexity of the agenda items, particularly 4.1 and 4.2. CPCs noted the five different proposals for agenda item 4.2. One CPC suggested a change in the order of agenda items, but the original agenda was adopted and is attached as **Appendix 1**.

**Appendix 2** includes a list of delegates from each participating CPC as well as observers.

**Appendix 3** contains the “Statement from Belize, Curaçao, El Salvador, Guatemala, Nicaragua, and Panama at the opening of the Third Intersessional Meeting of Panel 1”. This has been requested, particularly and especially in that there is an obligation to update the management measure for tropical tunas, since an extension of the current measures is not a valid option, given the need to revitalize the bigeye recovery programme and adjust it to the needs and conditions of the resource, as well as to the rights and aspirations of developing States.

### 4. Review proposed measures relevant to the conservation and management of tropical tunas

#### 4.1 Bigeye tuna Total Allowable Catch (TAC)

Many CPCs stated that their understanding from the previous meeting was that most CPCs had tentatively agreed on a TAC of 73,000 t, although some CPCs indicated that they would only accept this level of TAC if it is accompanied by appropriate additional measures. Many CPCs referred to the Harvest Control Rule (HCR) and the importance of measures to protect the stock.

Several CPCs restated their support for 73,000 t. One CPC emphasised the need to keep 73,000 t in square brackets to make clear that it is not agreed until additional measures are agreed, which was supported by several CPCs. The European Union, citing the difficulty in reaching agreement on this issue in previous discussions, and recalling that the priority was the TAC and allocation discussion and further recalling the limited time of the meeting, requested that the status quo of the current situation (72-day ban, 300 active FADs) be maintained. Canada, Gabon, the United Kingdom and the United States argued that a reduction in FADs (275) and an extension of the ban (even to 90 days) should be considered. Belize, Curaçao, El Salvador, Guatemala, Nicaragua and Panama argued that the measures in place have proven to have sufficient effect in containing juvenile mortality, and therefore the closure should be reduced to 60 days and the FADs should not be modified.

The Chair suggested that there appeared to be a basis for consensus on 73,000 t if accompanied by concrete measures, and invited CPCs to discuss the details of such measures, such as HCR and protection for juveniles.

The following documents were analyzed:

- a. "Proposal on bigeye allocation by Brazil, Japan and South Africa", and "Proposal on bigeye allocation by Brazil, Japan, South Africa and Uruguay", the subsequent version seconded by Uruguay;
- b. "Proposal by Belize, Curacao, El Salvador, Guatemala, Nicaragua, and Panama on the establishment of the bigeye TAC and a rule for the adjustment of the TAC in the light of new evidence provided by the SCRS", complemented by "Comparative of the proposal on the bigeye allocation by Central America and Curaçao vs the proposal by Brazil, Japan and South Africa";
- c. "Harvest Control Rule for bigeye" and the subsequent version, submitted by Japan, and complemented by the counter-proposal "Proposal by Belize, Curaçao, El Salvador, Guatemala, Nicaragua, and Panama on a graduality and equalization rule for the allocation of fishing possibilities adjusted to the bigeye tuna TAC", and subsequently the "Revision by the Central America and Curaçao Group to Japan's proposal on Harvest Control Rules (HCR) for bigeye (PA1\_JUN\_9A/i2023)" as well as the counter-proposal made by the United States "U.S. proposed edits to the revision by the Central America and Curaçao Group to Japan's proposal on [Harvest Control Rules (HCR)] [rules for setting the 2026 TAC] for bigeye (PA1\_JUN\_9A/i2023)";
- d. "Non-paper on additional management measures to complement TAC and allocation", submitted by the European Union.
- e. "Information on observer coverage for the tropical tuna fisheries reported to the ICCAT Secretariat under the Domestic Observer's Programme data provision requirements", prepared by the Secretariat at the request of Belize, Curaçao, El Salvador, Guatemala, Nicaragua, and Panama; and
- f. "Catches of juvenile and adult bigeye tuna by year and major gear", prepared by the Secretariat at the request of Curaçao;

Japan reintroduced the latest version of their proposal "Harvest Control Rule (HCR) for bigeye", which had been tabled at the [First Intersessional Meeting of Panel 1](#), held from 27 to 31 March in Lisbon, Portugal. CPCs discussed this in depth throughout the session, primarily regarding the probability of maintaining the stock in the green zone in the Kobe matrix, bearing in mind that the current management measure has the objective of achieving  $B_{MSY}$  by 2034 with a probability of more than 50%. In the "Proposal by Belize, Curaçao, El Salvador, Guatemala, Nicaragua, and Panama on the establishment of the bigeye TAC and a rule for the adjustment of the TAC in the light of new evidence provided by the SCRS", Central America and Curaçao proposed, in the interim, to standardise the probability at 60%. Informal exchanges between Japan and the Central America and Curaçao group led to a compromise of using both 65% for the reference point of TAC reduction and 70% for TAC increase. Japan adapted their original proposal to reflect discussions and resubmitted the proposal. Further discussion among CPCs focused on whether certain aspects of the HCR are obligatory for parties or whether parties may decide to take another approach, and the related use of "may" or "shall". This resulted in additional edits to the proposal by the Central America and Curaçao group "Revision by the Central America and Curaçao Group to Japan's proposal on Harvest Control Rules (HCR) for Bigeye (PA1\_JUN\_9A/i2023)" and to the "US proposed edits to the revision by the Central America and Curaçao Group to Japan's proposal on [Harvest Control Rules (HCR)] [rules for setting the 2026 TAC] for bigeye (PA1\_JUN\_9A/i2023)". This last version submitted by the United States was provisionally endorsed by the Panel, with the following text:

1. The Total Allowable Catch (TAC) for bigeye tuna shall tentatively be set at [73,000] t for 2024 and 2025. This TAC level shall be continued for 2026 if the stock assessment to be conducted in 2025 indicates that the probability of the stock being in the green zone in 2034 in K2SM (hereinafter called "the probability") is at or more than 65%. If the probability is less than 65%, the Commission shall adopt a TAC with a probability that is at or more than 65%. If the probability of a 2026 TAC of 73,000 t is more than 70%, the Commission SHALL consider possible increases to the TAC provided that the probability is at least 70%.

2. The Commission recognizes that the 65% probability is an interim figure for establishing the TAC for 2026 at the 2025 annual meeting; is higher compared to the percentages typically used for other ICCAT stocks; and does not set a precedent for future discussions of the Commission.
3. The Commission shall consider whether the TAC setting rules specified in paragraph 1 above should be maintained, altered, or replaced for use when adopting the TAC for 2027 and future years.”

It was noted that the square brackets in the document should remain and will be revisited alongside the development of discussions related to the TAC increase.

It was recognized that the “Proposal by Belize, Curaçao, El Salvador, Guatemala, Nicaragua, and Panama on a graduality and equalization rule for the allocation of fishing possibilities adjusted to the bigeye tuna TAC” contains relevant aspects on how the TAC would be redistributed in case the HCR should imply increases or decreases in the TAC, but this should be included in the analysis of the allocation key.

The SCRS Chair asked for clarification on the HCR discussion and the information required from the SCRS. Guatemala, supported by the other members of the Central American Group and Curaçao, confirmed their request to the SCRS to include a TAC of 73,000 t within the projections table related to the probability of being in the green zone of the Kobe matrix. This will provide a better understanding of the likelihood of being above or below the 65% or 70% reference points in 2034.

Some CPCs stated that in order to remove the square brackets from the TAC, they would require returning to a longer (three-month) closure period, as in *Recommendation by ICCAT on fishes considered to be tuna and tuna-like species or oceanic, pelagic, and highly migratory elasmobranchs (Rec. 19-01)*, noting that the increase in the TAC (if 73,000 t is agreed) would be of 11,000 t and an increase in closure period would give more protection to juveniles. Other CPCs expressed their opposition to an increase in the closure and decrease in the FADs per vessel because the fishing mortality figures have been considerably reduced to the point that the current TAC has not been exhausted recently.

Japan proposed a reduction in the number of FADs per vessel to 275 instead of an extension of the FADs closure period which has significant impact on the local economies of coastal developing countries, especially those with canning factories. Japan also stated that, although the SCRS did not give clear advice, having fewer FADs is better to reduce environmental problems such as marine debris.

Several CPCs stated that they would be content with a TAC of 73,000 t, 275 FADs per vessel and a consecutive closure period of 72 days; however, other CPCs were opposed to this and stated that more measures to protect juveniles are needed.

Some CPCs stated they would be content to continue with the status quo as regards FAD measures, noting the lack of scientific data and the upcoming stock assessment.

One party requested that the record reflect that all CPCs’ proposals should be afforded equal respect during these discussions, without *a priori* excluding their merit.

The ICCAT Secretariat was asked if there had been an update on progress as regards the lack of FAD fisheries data being submitted. The ICCAT Secretariat responded that there were no updates and the information contained in “Status on tropical tunas FAD fisheries data submissions by CPCs in 2022” and presented at the *First Intersessional Meeting of Panel 1* in March was the most up-to-date information. Guatemala recalled that paragraph 31 of the *Recommendation by ICCAT replacing Recommendation 21-01 on a Multi-annual Conservation and Management Programme for Tropical Tunas (Rec. 22-01)* clarified the requirement on the provision of historical data on FAD sets in the ST-03-T2CE format from at least the last five years and that during the 2022 Commission meeting, the Secretariat was urged to contact and support the CPCs that had not provided this information to facilitate compliance, as difficulties in the use of the format had been identified.

The SCRS Chair responded to some of the questions raised on FADs and juveniles. In summary, the SCRS Chair's response suggested that increasing the TAC could lead to an increase in juvenile catches, but there is a lack of evidence and data to determine the extent to which the measures would impact juveniles. Japan pointed out that the reduction of juvenile catch will increase the MSY level and lead to the TAC increase, which would give more room for fishery development for coastal developing CPCs. Guatemala recalled that it is imperative that when the SCRS Chair is consulted in this capacity, he should refer specifically to the result of the consensus discussions in that Committee without expressing personal opinions or clarifying the difference in his response. The SCRS Chair assured Guatemala that his responses were consistent with SCRS advice, conveying the result of the discussions and the consensus of the SCRS, and that if a response was only based on a personal view, he would make that clear.

The Chair of Panel 1 raised the precautionary approach in the absence of data from the SCRS. One party recalled that although the precautionary approach must be applied in the absence of data, the analysis of the experience in application and implementation of the current management measure, as well as other relevant aspects such as the decrease in fishing effort as a result of a lower number of vessels fishing in the Convention area, cannot be disregarded.

The EU invited CPCs to read their "Non-paper on additional management measures to complement TAC and allocation", with reference to the "Non-paper in view of the Intersessional Meeting of Panel 1" (PA1\_28/i2022) previously submitted by the EU at the [First Intersessional Meeting of Panel 1](#) in March 2023. The non-paper highlights a number of key provisions from the original EU proposal that the EU deems important and would wish to see reflected in any final agreement on a revised TAC and allocation key. This primarily includes the requirement for fishing, capacity and control plans from CPCs; endeavour to a move to biodegradable FADs to reduce plastic pollution; establishing a FAD register to avoid impact of lost and abandoned FADs; strengthening the transshipments framework; and reactivating the regional observer programme. These additional measures for FAD management were supported by several CPCs.

Several CPCs raised concerns on the requirement for prior approval by the Commission of fishing plans and stated that it would impose a constraint on developing coastal States that want to develop their fisheries. These CPCs also noted that the work required to develop and review such plans would require extra resources, particularly the time that it would involve and the uncertainty of the approval process, which is aggravated by the inequity that maintaining an unequal distribution of the TAC among the CPCs would imply. The EU offered to produce a template of a tropical tuna fishing plan in order to address the concerns raised on the complexity and burden of the task.

One CPC raised concerns regarding the regional observer programme with respect to African Parties, and highlighted difficulties in harmonising national rules.

The SCRS Chair delivered the presentation "Catches of juvenile and adult bigeye tuna by year and major gear" in response to a question on catches of juveniles from Curaçao, which showed catches by major gear types in terms of weight and number using Task 1 data from 1975 to 2019.

Several CPCs noted the need for a scientific basis for decisions on appropriate management measures for fishing for tropical tunas on FADs.

However, several CPCs also noted that a lack of sufficient advice and analysis cannot be an impediment to making sufficiently robust precautionary management decisions in respect of the FAD fishery, taking into account the evolution of all the aspects of the fishery.

Some CPCs posed questions to the SCRS. The SCRS Chair responded to these questions, including by referring to the "responses to the Commission" already provided by the SCRS and to further work underway to respond to Commission requests.

CPCs noted that in order to support the Commission in its decision-making at the 28th Regular Meeting of the Commission in November 2023, it will be important to agree a clear and comprehensive list of priority requests to the SCRS. This would ensure that the SCRS could undertake an appropriate, prioritised analysis, for example, of trends in the composition (size-frequency) of catches, particularly as the FAD fishery has developed, and provide advice on the appropriateness of different measures to reduce impacts on juveniles.

To this end, CPCs agreed that it would be helpful to produce a list of requests relevant to the management of tropical tunas. A list of questions raised by various CPCs which is attached to this report as **Appendix 4**.

The SCRS Chair was asked to consider these requests, including by providing an indication of responses to the Commission that have already been provided or are in progress.

One CPC stated that in the current measure, Parties are encouraged to refrain from increasing FADs and noted the deadline of 31 July for Parties to report on their use of FADs. Japan raised the importance of paragraph 31 of *Recommendation by ICCAT to replace Recommendation 16-01 by ICCAT on a Multi-Annual Conservation and Management Programme for Tropical Tunas (Rec. 19-02)* and stated that if CPCs do not report data in accordance with this paragraph they should be prohibited from fishing on FADs. Japan raised concerns that the Commission has not been implementing this paragraph strictly since the introduction of this Recommendation. Japan would be more strict on implementation of paragraph 31 at the meeting of the Compliance Committee (COC) this year if the Commission cannot agree to any additional measure for FAD management this year since the suspension of FAD fishing would have the same positive effects on the resources. Several CPCs supported this, bearing in mind that there have been implementation difficulties due to format issues and the task assigned to the Secretariat to support the CPCs with problems in understanding the format to be used and, furthermore, that the information to be submitted is that which is available and required according to the different Recommendations that have been in force.

One CPC asked the Secretariat whether there is enough observer coverage across CPCs. In response, the ICCAT Secretariat produced “Information on observer coverage for the tropical tuna fisheries reported to the ICCAT Secretariat under the Domestic Observer’s Programme data provision requirements” to the website. Several CPCs expressed the need to achieve greater and better coverage of the non-artisanal longline fishery to ensure a better understanding of its effects.

#### **4.2 Allocation key for distribution of bigeye tuna TAC**

The Chair of Panel 1 took stock of all five proposals regarding the allocation key for bigeye tuna TAC that have been previously submitted, and noted the new proposal developed and submitted by the Chair of Panel 1 for this meeting “Chair’s proposal on Allocation Key – A methodology that can be improved over the years 2024-2026”. Several CPCs expressed their appreciation for the Chair's proposal but stressed that its components differ greatly from the perspective that has been considered to achieve an equitable distribution key, and therefore expressed their preference to maintain the discussion route initiated since the [First Intersessional Meeting of Panel 1](#) this year. The Chair of Panel 1 emphasised the importance of reaching an agreement on one proposal, and that this could be a combination of elements from the several existing proposals.

There were extensive discussions, in particular surrounding the joint “Proposal by Belize, Curaçao, El Salvador, Guatemala, Nicaragua, and Panama on a graduality and equalization rule for the allocation of fishing possibilities adjusted to the bigeye tuna TAC”, and the joint “Proposal on bigeye allocation by South Africa, Brazil, Japan, and Uruguay”, a revised version of which was presented. Both proposals suggest an allocation system based on groupings of CPCs, which was welcomed by most CPCs. Following discussions, the Central America and Curaçao group submitted a revised version of the “Comparative of the proposal on the bigeye allocation by Central America and Curaçao vs the proposal by Brazil, Japan and South Africa” which compared the two proposals.

Canada introduced their joint proposal with the United Kingdom and the United States “A small harvester concept: Coastal developed CPCs that are small harvesters and the allocation of bigeye tuna”, which was submitted to the [First Intersessional Meeting of Panel 1](#) in March. Canada explained the importance of retaining a category in the allocation for CPCs that are neither a major harvester nor a developing State, referred to in this proposal as “developed small harvester CPCs”.

Throughout the session, several CPCs supported that there should be no hard limits for those CPCs that catch less than 1,000 t in order to allow developing CPCs to develop their fisheries.

When Japan introduced their new proposal “Proposal on bigeye allocation by South Africa, Brazil, Japan, and Uruguay”, it noted that it was similar to the modified version of the “Proposal on bigeye allocation by

Brazil, Japan and South Africa” submitted to the [First Intersessional Meeting of Panel 1](#) in March, but had been modified to reflect discussions during the meeting. Japan explained that one of the main changes was to clarify how CPCs would “graduate” from category D and stated that should a CPC in category D exceed the 1,000 t threshold, Panel 1 would assign the CPC a catch limit. Half of the limit for the graduating CPC from category D would come from the catch limit for category D and half from the reserve obtained through the permanent redistribution scheme. If there is not enough in the reserve, then it would come from the catch limits for A and B. The proposal had initially lowered the threshold for category D from 1,000 t to 900 t; however, following discussions with CPCs this change was reversed. Several CPCs expressed concerns over the graduation concept and lack of certainty over the reserve element. Some CPCs also expressed concerns over the limits that their groups had been given, taking into account that it is not realistic for a CPC to exhaust the threshold limit, which would allow the Commission to react in a timely manner, without detriment to any warning mechanisms that could be introduced in the measure, but bearing in mind that these warning mechanisms should be used to anticipate any TAC redistribution processes that may be indispensable in the future.

Japan explained another change in the proposal was to encourage the transfer of catch limits from developed to developing CPCs. If a developed CPC transferred catch limits to a developing CPC, then it could count as used catch limit; on the other hand, if a developed CPC transferred catch limits to another developed CPC it would count as unused. Several CPCs raised concerns on this. Japan noted these concerns but remarked this was still beneficial to developing countries and therefore put this paragraph in square brackets to allow further discussions.

One CPC asked for clarification regarding the long- and short-term redistribution scheme in Brazil, Japan, South Africa, and Uruguay’s joint proposal. It was explained that if a CPC does not utilise its catch limits in one year, then it would be subject to the short-term redistribution, but if underutilised for two consecutive years, then the CPC would be subject to the longer-term redistribution scheme.

Several CPCs expressed concerns over the joint “Proposal on bigeye allocation by South Africa, Brazil, Japan, and Uruguay” and the impact this would have on developing CPCs, fearing that it would restrict those developing to 1,000 t only. Japan clarified that this joint proposal contains no catch limit for category D, but a trigger threshold for graduating into category C. Japan acknowledged that the word “total catch *limit*” for category D had been used, but admitted that this was the wrong word and suggested the correct choice would be total “*reserve*” instead.

Some CPCs asked for clarification on which countries were included in the “others” sub-group within category D and the justification of the 2,200 t that is allocated to that group. Japan confirmed that the “others” group in category D includes the United States, United Kingdom, and Canada and possibly France (in respect of St Pierre and Miquelon) and indicated the rationale behind the 2,200 t would be investigated.

Several CPCs expressed that an important challenge of the distribution key is to ensure, as far as possible, the equity of the distribution, and the certainty of TAC utilization, therefore preventing any CPC from having available TAC amounts that it would not use or that it would transfer to another CPC. Hence the need to clearly establish the historical needs of active participants, to recognize the right of new participants and the right to reasonable and measured growth of small and medium catchers and the implicit obligation of the largest catchers to restrict their fisheries, with special attention to the rights of developing States.

One CPC noted that, with respect to all allocation proposals, although the 2025 stock assessment was referenced on multiple occasions, there had not yet been a specific agreement on the length of the management measure itself, and this question should be addressed.

Guatemala, on behalf of the Central America and Curaçao group, presented the “Comparative of the proposal on the bigeye allocation by Central America and Curaçao vs the proposal by Brazil, Japan and South Africa” and explained that the comparison paper was a simulation of the implementation of “Proposal by Belize, Curaçao, El Salvador, Guatemala, Nicaragua, and Panama on a graduality and equalization rule for the allocation of fishing possibilities adjusted to the bigeye tuna TAC”.

Guatemala pointed out that a key difference between their joint proposal and South Africa, Brazil, Japan, and Uruguay's joint proposal is that CPCs in groups A and B would be in group A of the proposal by Central America and Curaçao (this is all harvesters in excess of 10,000 t).

Japan expressed strong opposition to the joint proposal from Central America and Curaçao because it discriminates against Japan, as only Japan's catch limit would decrease from the current catch limit while other CPCs' catch limits would increase.

Several CPCs raised concern that in the joint proposal from Central America and Curaçao, it is not clear what will happen to a CPC in category D if they exceed 1,000 t because there is no catch limit or numbers assigned to a trigger threshold for category D. In response, Guatemala explained that category D does not have a limit but they have a reserve for management purposes. If the CPC in category D exceeds 1,000 t in two out of three years, the Commission would need to establish a catch limit for that CPC. It is reiterated that it is unrealistic for the CPC to exhaust the threshold limit, which would allow a timely reaction by the Commission, without detriment to any warning mechanisms that could be introduced in the measure, but bearing in mind that these warning mechanisms should be used to anticipate any TAC redistribution processes that may be indispensable in the future.

Several CPCs emphasised the importance of continuing the discussions to ensure that there is a governance structure in place particularly for the TAC allocated to group D alongside the categorisation of CPCs in the other categories.

One CPC stated that the joint proposal from Central America and Curaçao allocates 87% of the TAC, but noted that this is if Korea (Rep.) is not included and with a major reduction to Japan's allocation. They noted that if the Korea (Rep.) quota and an improved quota for Japan is added, then 90%+ of the TAC would be allocated and the amount left for category D would be less than in South Africa, Brazil, Japan, and Uruguay's joint proposal.

It was noted that one of the main differences between the two proposals is the basis for allocating the limits. South Africa, Brazil, Japan, and Uruguay's joint proposal is based on the current catch limits, and the joint proposal from Central America and Curaçao is based on the best average catch from the best four years over a six-year period. Several CPCs raised concerns on the use of the current catch limit and suggested it does not reflect the needs and real opportunities of CPCs. By contrast, Japan raised concerns on the use of past record catches as the basis, noting that CPCs may not have fished in previous years for several reasons and so would not be able to determine their best years of catches from this time period. Japan also commented that this would penalise countries that have contributed to the recovery of the stock. Some CPCs suggested alternative reference years should be used. Guatemala, on behalf of the co-proponents expressed that they would be open to considering different options to ensure a mechanism that includes a reference period that meets everybody's needs. This could imply ad hoc compromises for specific cases, and Guatemala therefore invited each CPC to restrict its aspiration to what it specifically foresees as a requirement for its fleet over the next 3 years which is the period that would be covered by a new proposal, without considering a longer term distribution that is not deemed viable when considering CPC aspirations and the fluctuation, even downwards, in fishing effort that has occurred.

The Chair of Panel 1 suggested CPCs should use one of the proposals as the starting point for the final proposal and pull elements from other proposals. It was suggested that South Africa, Brazil, Japan, and Uruguay's joint proposal should be the starting point, which was supported by several CPCs but opposed by several other CPCs that considered that there is merit in all the proposals and that the structure of work and analysis that has been developed must be recovered from a combination, without giving special credit to any in particular. CPCs agreed to work on their proposals with their co-sponsors, with the aim of incorporating comments from CPCs to find ways of converging for the next meeting.

#### ***4.3 Provisions related to the carry forward of underharvests and payback of overharvests***

The Chair of Panel 1 noted that this topic had been discussed at length in other meetings but invited CPCs to reflect on any further thoughts they have had.

One CPC referred to the discussion on their overharvest payback plan at the [First Intersessional Meeting of Panel 1](#) in March and stated that they are waiting for the Commission to consider their pay-back plan for 10 years starting from 2023.

Japan acknowledged that some CPCs have an issue with the current measure that allows for a 10% carry-over and referred to their joint paper on bigeye allocation, which allows differential treatment with only 5% for some countries and 10% for developing countries.

Several CPCs stated they were content with the current provisions already in place and stated that there could be a number of reasons why a CPC might not use its quota in one year.

One CPC asked for clarification on Brazil, Japan, South Africa and Uruguay's joint proposal on the bigeye allocation, specifically whether the limits of unused bigeye quota carried forward is a percentage of the unused quota or of the initial quota. Japan clarified that the percentage would be applied to the initial quota, and that they could not agree to this suggestion to apply this to the unused proportion.

Several CPCs stated their position that underharvest should not be carried forward to a future year and that a CPC's contribution to conserving the species should be considered.

One CPC noted that it would be useful to reference the [Report of the Independent Performance Review of ICCAT - 2016](#) (ICCAT, 2016), which lists a 2008 panel recommendation stating: "the Panel concluded that the measures adopted by ICCAT have led to slow rebuilding of the stock. Recommendation 06-06 reinforced the early recovery plan and would be enhanced with the withdrawal of the provision that allows for the carry forward of under-catch and the addition of the provision for timely and accurate data by all parties."

#### **4.4 FAD management and closure**

This agenda item was addressed under item 4.1. There was no consensus on this issue but it would be addressed in conjunction with the discussion on a new conservation measure.

#### **4.5 Consideration of TAC and allocation for yellowfin tuna**

The SCRS Chair gave an update and the next steps on yellowfin tuna. The update referred to the [Report of the 2019 ICCAT Yellowfin Tuna Stock Assessment Meeting](#) (Anon., 2020) as the most recent yellowfin stock assessment. It used 2018 data, which was noted to be very incomplete (with more than 40% of the data used for the assessment being estimated at the meeting). At the time, it was estimated that there was no overfishing and the stock was not being overfished, with an estimated MSY of around 121,000 t. The SCRS Chair noted that there were some substantial changes in the perceived historical trajectory of the stock status, which was declining, although some of these changes were attributed to new data and models. There were concerns that led to some uncertainty in the advice, that the data for 2018 had to be estimated, including some of the important and influential indices, at a very short time. The SCRS Chair also noted that the assessment depended upon joint work to develop a longline index, which is considered to be highly influential and important for bigeye and yellowfin stock assessments. The SCRS Chair emphasised the importance of being able to conduct work as it was done before the pandemic, using detailed data from the major fisheries in an in-person meeting to protect confidentiality. The SCRS Chair stated the current plan is to carry out the next yellowfin stock assessment in 2024, which will be reviewed by the Tropical Tunas Species Group in the SCRS plenary. In its latest advice, the Tropical Tunas Species Group expressed concern that catches exceeding 120,000 t would cause the decline of the stock to continue. The SCRS Chair noted the following Task 1 catches for yellowfin from 2018 to 2021, respectively: 137,000 t, 137,000 t, 157,000 t, and 111 000 t. The reasons for this and whether this will cause problems for the stock will be evaluated more fully in the assessment.

Several CPCs expressed concerns on the overharvest and overshooting and noted the importance of the stock to food security.

One CPC asked if the catch data for 2021 and 2022 would be utilised in the stock assessment next year. The SCRS Chair noted that ideally the most recent data possible would be used for the assessment. He noted that 2022 data would be used, but emphasised that CPCs would need to make a dedicated effort to report their

data early and that the data preparatory meeting would also need to be held early in order for 2023 data to be used in 2024.

## 5. Other matters

### 5.1 Tropical tunas MSE

The SCRS Chair provided an update on western skipjack management strategy evaluation (MSE). He recapped that in the [Intersessional Meeting of the Tropical Tunas Species Group \(including MSE\)](#) in March (Anon., 2023), the input received from Panel 1 included operational objectives including a probability of 70% or more in the green status, 10% or less falling below the  $B_{LIM}$  safety level and continuing the three-year management cycles, as well as including overfishing statistics and adding climate change robustness tests, if possible. Since this input was received, the SCRS has followed the MSE road map, which calls for a candidate management procedure (CMP) to be ready for adoption this year. Performance testing is underway and so are efforts to develop a climate change robustness test, which is largely being carried out by a contracted team of analysts who are also SCRS scientists. This will also be reviewed by the Tropical Tunas Technical Sub-group on MSE. The sub-group will prepare a “strawman” proposal of viable candidate management procedures, including performance statistics and trade-offs, for review by the Tropical Tunas Species Group at the SCRS plenary. The final adopted advice will be presented to Panel 1 at the 2023 Commission meeting for a decision on which procedure to adopt.

## 6. Adoption of report / adjournment

At the close of the meeting, Panel 1 recognized that at this meeting there was little possibility of continuing the discussions in view of the allotted time; however, with slight reservations, a positive spirit of progress was maintained. It was also recognized that before the Annual Meeting in November 2023 (Egypt), it is necessary to hold an additional meeting of Panel 1, which will be virtual, in October of this year, to demonstrate progress and explore the possibility of reaching the 2023 Commission meeting with a consensus proposal. To this end, it was decided that:

- a) All CPCs will maintain an active negotiating spirit and will establish bilateral or multilateral contacts at their initiative, to address pending issues.
- b) The Chair of Panel 1 will monitor progress and seek to bring positions closer together.
- c) An additional online meeting between now and the Annual Meeting in November will be needed to enable more progress to be made ahead of the Annual Meeting. The ICCAT Secretariat proposed 23 October for the meeting, from 10 a.m. to 6 p.m. Madrid time, which all Panel 1 CPCs will be invited to attend. The meeting will include interpreters.
- d) CPCs agreed they will contact each other where necessary to make progress on items ahead of the October meeting.
- e) The Chair of Panel 1 suggested that he would work with the ICCAT Secretariat to monitor this through fortnightly emails in order to gauge the progress being achieved on work.

## References

Anonymous. 2020. [Report of the 2019 ICCAT Yellowfin Tuna Stock Assessment](#). Collect. Vol. Sci. Pap. ICCAT, 76(6): 344-515.

Anonymous. 2023. [Report of the 2023 Intersessional Meeting of the Tropical Tuna Species Group \(including MSE\)](#). Collect. Vol. Sci. Pap. ICCAT, 80(2): 1-108.

ICCAT. 2016. [Report of the Independent Performance Review of ICCAT](#).

## Agenda

1. Opening of the meeting
2. Appointment of rapporteur and meeting arrangements
3. Adoption of the agenda
4. Review proposed measures relevant to the conservation and management of tropical tunas
  - 4.1 Bigeye tuna Total Allowable Catch (TAC)
  - 4.2 Allocation key for distribution of bigeye tuna TAC
  - 4.3 Provisions related to the carry forward of underharvest and payback of overharvests
  - 4.4 FAD management and closure
  - 4.5 Consideration of TAC and allocation for yellowfin tuna
5. Other matters
  - 5.1 Tropical tunas MSE
6. Adoption of report / adjournment

**List of participants<sup>1</sup>****CONTRACTING PARTIES****ANGOLA****Braga Gomes**, Wilson Luis

Interchange technician, Ministry of Fisheries and Marine Resources of Angola, Complexo Administrativo Clássico de Talatona, 5º Edifício - 5º andar, Luanda

Tel: +244 924 530 580, E-Mail: wilsongromela@hotmail.com; wilsongromek@hotmail.com

**Dos Santos Gourgel**, Ana Patricia

Head of Fisheries data Management Department, Ministry of Fisheries and Marine Resources of Angola, Complexo Administrativo, Clássico de Técnica, Rua do Mat 5 Edifício, 3 andar, Luanda

Tel: +244 916 633 799, E-Mail: patcristal2@gmail.com

**BELIZE****Lanza**, Valarie \*

Director of High Seas Fisheries, Belize High Seas Fisheries Unit, Ministry of Finance, Government of Belize, Keystone Building, Suite 501, 304, Newtown Barracks Belize City

Tel: +501 223 4918, Fax: +501 223 5087, E-Mail: valerie.lanza@bhsfu.gov.bz; director@bhsfu.gov.bz

**Robinson**, Robert

Deputy Director for High Seas Fisheries, Belize High Seas Fisheries Unit, Ministry of Finance, Government of Belize, Keystone Building, Suite 501, 304 Newtown Barracks, Belize City

Tel: +501 223 4918, Fax: +501 223 5087, E-Mail: deputydirector@bhsfu.gov.bz; robert.robinson@bhsfu.gov.bz

**Urrutia**, Xabier

PEVASA, Poligono Landabaso s/n, 48370 Bermeo Bizkaia, Spain

Tel: +34 656 708 139, E-Mail: xabierurrutia@pevasa.es; nherrero@pevasa.es

**BRAZIL****Lucena Frédou**, Flávia \*

National Registry, Monitoring and Research Secretary, 70070-020 Brasilia DF

Tel: +55 61 3276 4439, E-Mail: flavia.fredou@agro.gov.br

**Araujo Cruz**, Rivetla Edipo

Setor de Autarquia Sul, 2, 70297-400 Brasilia, DF

Tel: +55 91 983 452 919, E-Mail: araujo.edipo@gmail.com; rivetla.cruz@agro.gov.br

**Bispo Oliveira**, André Luiz<sup>1</sup>

International Negotiations Coordinator, Ministry of Fisheries and Aquaculture, International Advisory, 702974-00 Brasilia DF

**Hazin**, Rodrigo Fauze

SINDIPESCA, Zona Cívico Administrativa, Rua Chile, 216, Ribeira, Rio Grande do Norte, Natal

Tel: +55 84 98756 8073, E-Mail: diretoria.rodriigo@nortepesca.com.br

**Lira**, Alex

Setor de Autarquias Sul Q. 2, 70297-400 Brasilia DF

Tel: +55 819 855 15243, E-Mail: alex.lira@agro.gov.br

**Mallmann Specht**, Luana

SINDIPI-Sindicato dos Armadores e das Indústrias da Pesca de Itajaí e Região, Rua Lauro Muller, 386 - Centro - Itajaí - Santa Catarina, 88301-400 Itajaí Santa Catarina

Tel: +55 479 966 31427, E-Mail: c.t@sindipi.com.br

**Martins Dias**, Rafael

Chief of International Advisory, Ministry of Fisheries and Aquaculture, International Advisory, Esplanada dos Ministérios, Bloco D, 4º Andar - Bairro Zona Cívico-Administrativo, 70043-900

Tel: +55 61 3276 4611, E-Mail: rafael.mdias@agro.gov.br; internacional.sap@agro.gov.br

---

\* Head Delegate

<sup>1</sup> Some delegate contact details have not been included following their request for data protection.

**Ribeiro Borcem**, Elielma

Ministério da Agricultura, Pecuária e Abastecimento, Departamento de Planejamento e Ordenamento da Pesca, Setor de Autarquias Sul, Quadra 2, 71699-785 Brasília  
Tel: +55 61 9830 62548, E-Mail: elielma.borcem@agro.gov.br

**Sant'Ana**, Rodrigo

Researcher, Laboratório de Estudos Marinhos Aplicados - LEMA Ecola do Mar, Ciência e Tecnologia - EMCT, Universidade do Vale do Itajaí - UNIVALI, Rua Uruquai, 458 - Bloco E2, Sala 108 - Centro, Itajaí, CEP 88302-901 Santa Catarina Itajaí  
Tel: +55 (47) 99627 1868, E-Mail: rsantana@univali.br

**Travassos**, Paulo Eurico

Professor, Universidade Federal Rural de Pernambuco - UFRPE, Laboratorio de Ecologia Marinha - LEMAR, Departamento de Pesca e Aquicultura - DEPAq, Avenida Dom Manuel de Medeiros s/n - Dois Irmãos, CEP 52171-900 Recife, Pernambuco  
Tel: +55 81 998 344 271, E-Mail: pautrax@hotmail.com; paulo.travassos@ufrpe.br

**CANADA****Waddell**, Mark \*

Director General, Fisheries and Oceans Canada, 200 Kent Street, Ottawa ON K1A0E6  
Tel: +1 613 897 0162, E-Mail: mark.waddell@dfo-mpo.gc.ca

**Boudreau**, Cyril L.

Senior Fisheries Strategist Nova Scotia Department of Fisheries and Aquaculture, Halifax, Nova Scotia B3J 2R5  
Tel: +1 902 266 8345, E-Mail: Cyril.Boudreau@novascotia.ca

**Cossette**, Frédéric

200 Kent St., Ottawa, Ontario K1A 0E6  
Tel: +1 343 541 6921, E-Mail: frederic.cossette@dfo-mpo.gc.ca

**MacDonald**, Carl

Senior Advisor, Fisheries and Oceans Canada, 1 Challenger Drive, PO Box 1006, Bedford Institute of Oceanography, Dartmouth, NS B2Y 4A2  
Tel: +1 902 293 8257, E-Mail: carl.macdonald@dfo-mpo.gc.ca

**Ramsay**, Laura

Prince Edward Island Fishermen's Association, Suite 102, 420 University Avenue, Charlottetown, P.E.I C1A 7Z5  
Tel: +1 902 393 2281; +1 902 566 4050, E-Mail: laura@peifa.org; researchpeifa@eastlink.ca

**CHINA (P.R.)****Fang**, Lianyong

Director assistant, China Overseas Fisheries Association, Room 1216, Jingchao Massion, Nongzhanguannan Road, Cahoyang District, 100126 Beijing  
Tel: +86 10 65853488, Fax: +86 10 65850551, E-Mail: fanglianyong@cofa.net.cn

**Feng**, Ji

Shanghai Ocean University, 999 Hucheng Huan Rd, 201306 Shanghai  
Tel: +86 159 215 36810, E-Mail: fengji\_shou@163.com; fji13\_shou@yeah.net; 276828719@qq.com; f52e@qq.com

**Li**, Tinglin

Room 1216, Jingchao Massion, Nongzhanguannan Road, Chaoyang District, 100125 Beijing  
Tel: +86 1 065 850 683, Fax: +86 1 065 850 551, E-Mail: litinglin@cofa.net.cn; 962146246@QQ.COM

**Liu**, Xiaobing

Professor, China Overseas Fisheries Association, Shanghai Ocean University, Room 3-1101, Building Jia 9, No. 12, Zhongguancun Nandajie, 100081 Beijing  
Tel: +86 135 013 59986, E-Mail: xiaobing.liu@hotmail.com; Xiaobing.Liuc@163.com

**Zhang**, Fan

Shanghai Ocean University, 999 Hucheng Huan Rd, 201306 Shanghai  
Tel: +86 131 220 70231, E-Mail: f-zhang@shou.edu.cn

**CÔTE D'IVOIRE****Deleuse, Serge Donald**

Sous-Directeur de la Surveillance des Pêches, Direction des Pêches, 27 Rue des Pêcheurs, face au Groupement de sécurité portuaire de la Gendarmerie Nationale Zone 3C, Treichville, BPV 19 Abidjan  
Tel: +225 07 07 22 15 95, E-Mail: donald.deleuse10@gmail.com

**Djou, Kouadio Julien**

Statisticien de la Direction de l'Aquaculture et des Pêches, Chef de Service Etudes, Statistiques et Documentation, Direction de l'Aquaculture et des Pêches (DAP), Ministère des Ressources Animales et halieutiques (MIRAH), 27 Rue des pêcheurs, BP V19, Abidjan 01  
Tel: +225 79 15 96 22, Fax: +225 21 25 67 27, E-Mail: djoujulien225@gmail.com; ko.djou@ressourcesanimales.gouv.ci

**Hema, Catherine**

Coordonnatrice Adjointe du Programme d'Appui à la Gestion Durable des Ressources Halieutiques  
Tel: +225 0749 924 593, E-Mail: hemacathy4@gmail.com; hemacathy@yahoo.fr

**CURAÇAO****Chong, Ramon \***

Chairman of the International Fisheries Commission, Ministry of Economic Development of Curaçao, International Fisheries Commission, Directorate of Economic Affairs, Amidos Building, Pletterijweg 41, Willemstad  
Tel: +5999 529 7290; +5999 462 1444, Fax: +5999 462 7590, E-Mail: ramon\_chong@hotmail.com; ramon.chong@gobiernu.cw

**Alonso Olano, Borja**

Overseas Tuna Company N.V., Polígono Industrial Landabaso, s/n - Edificio Albacora, 48370 Bermeo Bizkaia, Spain  
Tel: +34 946 187 000, Fax: +34 946 186 147, E-Mail: borja.alonso@albacora.es

**Mambi, Stephen A.**

Policy Adviser/Secretary of the Fishery Commission, Ministry of Economic Development of Curaçao, Directorate of Economic Affairs, Amidos Building, 4th floor Pletterijweg 43 A, Willemstad  
Tel: +5999 4621444 ext 173; +5999 5606038, Fax: +5999 462 7590, E-Mail: stephenmambi@yahoo.com; stephen.mambi@gobiernu.cw

**Ramos, Ernesto**

Fishery observer of Curaçao  
E-Mail: ernesto.ramos@gobiernu.cw

**Suarez, Carl Michael**

Senior Operator of the Fishery Monitoring Centre, Ministry of Economic Development, Directorate of Economic Affairs, Amidos Building, Pletterijweg 43 A, Willemstad  
Tel: +59 995 297 213, E-Mail: michael.suarez@gobiernu.cw

**Uribe, Iñigo**

NICRA 7, S.L., C/ Txibitxiaga, Nº 16, Entreplanta, 48370 Bermeo, Vizcaya, Spain  
Tel: +34 94 618 70 16; +34 629 452 923, E-Mail: iuribe@nicra7.com

**EGYPT****Badr, Fatma Elzahraa**

Fish Production Specialist, Agreements Administration, Lakes and Fish Resources Protection and Development Agency, 210, area B - City, 5th District Road 90, 11311 New Cairo  
Tel: +201 092 348 338, Fax: +202 228 117 008, E-Mail: fatima.elzahraa.medo@gmail.com

**EL SALVADOR****Galdámez de Arévalo, Ana Marlene**

Jefa de División de Investigación Pesquera y Acuícola, Ministerio de Agricultura y Ganadería, Head Final 1a. Avenida Norte, 13 Calle Oriente y Av. Manuel Gallardo. Santa Tecla, La Libertad  
Tel: +503 2210 1913; +503 619 84257, E-Mail: ana.galdamez@mag.gob.sv

**Sánchez Campos, Brenda Marilyn**

Tel: +503 695 87858, E-Mail: brenda.sanchez@mag.gob.sv

**Arranz Vázquez, Cristina**

CALVO, C/ Príncipe de Vergara 110, 4ª Planta, 28002 Madrid, Spain  
Tel: +34 682 589 986; +34 917 823 300, E-Mail: cristina.arranz@ctmcorporation.com

**Ubis Lupión, Macarena**

Calvopesca El Salvador, S.A., C/ Príncipe de Vergara 110, 4ª Planta, 28002 Madrid, Spain  
Tel: +34 617 068 486; +34 91 782 33 00, E-Mail: macarena.ubis@ctmcorporation.com

**EQUATORIAL GUINEA****Nsó Edó Abegue, Rubén Darío \***

Jefe de Gabinete del Ministro de Pesca y Recursos Hídricos de Guinea Ecuatorial, Ministerio de Pesca y Recursos Hídricos, B/ Santa Mª III s/n, Malabo

Tel: +240 222 252 680, Fax: +240 092 953, E-Mail: granmaestrozaiko@yahoo.es

**EUROPEAN UNION****Billiet, Stijn \***

Head of EU Unit, European Commission, DG Mare B 2, Rue Joseph II - 99, 1049 Brussels, Belgium

Tel: +32 229 57641, E-Mail: stijn.billiet@ec.europa.eu

**Howard, Séamus**

European Commission, DG MARE, Rue Joseph II 99, 1000 Brussels, Belgium

Tel: +32 229 50083; +32 488 258 038, E-Mail: Seamus.HOWARD@ec.europa.eu

**Jurado, Kristel**

DG MARE, Rue Joseph II 99, B-1040 Brussels, Belgium

Tel: +32 229 80059, E-Mail: kristel.jurado@ec.europa.eu

**Valverde, Eliott**

DG MARE, 99 Rue Joseph II, B-1000 Brussels, Belgium

Tel: +33 673 046 673, E-Mail: Eliott.VALVERDE@ec.europa.eu

**Abreu Gouveia, Nuno Manuel**

Director Serviços, SRAP - Direção Regional de Pescas, Direção Serviços de Inspeção e Controlo - DSIC, Praça da Autonomia nº 1, Edifício da Sociedade Metropolitana de Câmara de Lobos, 9300-138 Câmara de Lobos, Madeira, Portugal

Tel: +351 965 014 357, Fax: +351 291 229691, E-Mail: nuno.gouveia@madeira.gov.pt

**Alzorriz, Nekane**

ANABAC, Txibitxiaga 24 entreplanta, 48370 Bermeo, Vizcaya, Spain

Tel: +34 94 688 2806; +34 650 567 541, E-Mail: nekane@anabac.org

**Ansell, Neil**

European Fisheries Control Agency, Avenida García Barbón 4, 36201 Vigo, Spain

Tel: +34 986 120 658; +34 698 122 046, E-Mail: neil.ansell@efca.europa.eu

**Ávila, Paulo**

Associação de Produtores de Atum e Similares dos Açores - APASA, Cais de Santa Cruz, Edifício Lotaçor, 9900-172 Horta, Azores, Portugal

Tel: +351 965 707 803, E-Mail: paulo.avila@apasa.pt

**Capela, Pedro**

APASA - Associação de Produtores de Atum e Similares dos Açores, Cais de Santa Cruz - Edifício Lotaçor, 9900-172 Horta, Azores, Portugal

Tel: +351 913 842 342; +351 292 392 139, E-Mail: apasa-op@apasa.pt

**Carré, Pierre-Alain**

Compagnie française du thon océanique (CFTO), 11 Rue des sardiniers, 29900 Concarneau, Cedex, France

Tel: +33 682 234 171, Fax: +33 298 60 52 59, E-Mail: pierrealain.carre@cfto.fr

**Costa, Daniela**

CCRUP, Rua de São Paulo, 3, 9760-540 Praia da Vitória, Azores, Portugal

Tel: +351 963 370 078, E-Mail: dcosta@ccrup.eu; info@ccrup.eu

**Gaertner, Daniel**

Institut de Recherche pour le Développement (IRD) UMR MARBEC (IRD/Ifremer/CNRS/UMII), CRH, CS 30171, Av. Jean Monnet, 34203 Sète Cedex, France

Tel: +33 4 99 57 32 31, Fax: +33 4 99 57 32 95, E-Mail: daniel.gaertner@ird.fr

**Goujon, Michel**

ORTHONGEL, 5 Rue des Sardiniers, 29900 Concarneau, France  
Tel: +33 2 9897 1957; +33 610 627 722, Fax: +33 2 9850 8032, E-Mail: mgoujon@orthongel.fr

**Gouveia Fernandes, Rui Agostinho**

Direção Regional de Pescas, Edifício da Sociedade Metropolitana de Câmara de Lobos, Praça da Autonomia, 9300-138  
Câmara de Lobos Madeira, Portugal  
Tel: +351 914 692 038; +351 962 936 364, E-Mail: rui.fernandes@madeira.gov.pt

**Guerreiro, Alexandra de Carvalho dos Santos**

Direcao Regional das Pescas, Rua Consul Dabney - Colonia Alema Apartado 9, 9900-014, Portugal  
Tel: +351 292 202 400; +351 962 518 077, Fax: +351 292 240 890, E-Mail: Alexandra.CS.Guerreiro@azores.gov.pt

**Hamilton, Amanda**

Trimarine, France  
E-Mail: ahamilton@trimarinegroup.com

**Herrera Armas, Miguel Ángel**

Deputy Manager (Science), OPAGAC, C/ Ayala 54, 2º A, 28001 Madrid, Spain  
Tel: +34 91 431 48 57; +34 664 234 886, Fax: +34 91 576 12 22, E-Mail: miguel.herrera@opagac.org

**Leduc, Xavier**

Orthongel, 5, rue des sardiniers, 29900 Bretagne, France  
Tel: +33 608 784 525, E-Mail: xleduc@orthongel.fr

**Mathieu, Héloïse**

Comité des Pêches Guadeloupe (CRPMEM-IG), 2 bis rue Schoelcher, 97110 Pointe-à-Pitre, Guadeloupe, France  
Tel: +33 590 909 787, E-Mail: mathieu.crpmem971@orange.fr

**Morón Ayala, Julio**

Director Gerente, Organización de Productores Asociados de Grandes Atuneros Congeladores - OPAGAC, C/ Ayala, 54 -  
2ºA, 28001 Madrid, Spain  
Tel: +34 91 575 89 59; +34 616 484 596, Fax: +34 91 576 1222, E-Mail: julio.moron@opagac.org

**Muniategi Bilbao, Anertz**

ANABAC-OPTUC, Txibitxiaga, 24 - Entreplanta Apartado 49, 48370 Bermeo - Vizcaya, Spain  
Tel: +34 94 688 28 06, Fax: +34 94 688 50 17, E-Mail: anertz@anabac.org; anabac@anabac.org

**Orozco, Lucie**

Chargée de mission affaires thonières, Direction générale de affaires maritimes, de la pêche et de l'aquaculture  
(DGAMPA), Bureau des Affaires Européennes et Internationales (BAEI), 1 place Carpeaux, 92055 La Défense, Île de  
France, France  
Tel: +33 140 819 531; +33 660 298 721, E-Mail: lucie.orozco@mer.gouv.fr

**Rodrigues, Raquel**

Federação das Pescas dos Açores, Praia da Vitória, 9760-541 Ilha Terceira, Azores, Portugal  
Tel: +351 969 350 946, E-Mail: rrodrigues@federacaopescasacores.pt

**Santiago Burrutxaga, Josu**

Head of Tuna Research Area, AZTI-Tecnalia, Txatxarramendi z/g, 48395 Sukarrieta (Bizkaia) País Vasco, Spain  
Tel: +34 94 6574000 (Ext. 497); +34 664 303 631, Fax: +34 94 6572555, E-Mail: jsantiago@azti.es; flarrauri@azti.es

**Sarricolea Balufo, Lucía**

Secretaría General de Pesca, Ministerio de Agricultura, Pesca y Alimentación, Calle Velázquez, número 144, 28006  
Madrid, Spain  
Tel: +34 913 476 170; +34 618 330 518, E-Mail: lsarricolea@mapa.es

**Soroa, Borja**

Pesquería Vasco Montañesa, S.A. (PEVASA), Polígono Landabaso S/N, 48370 Bermeo, Spain  
Tel: +34 946 880 450, Fax: +34 946 884 533, E-Mail: borjasoroa@pevasa.es; pevasa@pevasa.es

**Teixeira, Isabel**

Chefe de Divisão de Recursos Externos da Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos, DGRM,  
Avenida Brasília, 1449-030 Lisbon, Portugal  
Tel: +351 919 499 229, E-Mail: iteixeira@dgrm.mm.gov.pt

**Trigo, Patricia**

DGRM, Avenida Brasilia ES8, 1449-030 Lisbon, Portugal

Tel: +351 969 455 882; +351 213 035 732, E-Mail: pandrada@dgrm.mm.gov.pt

**Yague Sabido, Ismael**

C/ Velázquez 144, 28006 Madrid, Spain

Tel: +34 913 476 178; +34 606 873 653, E-Mail: iyague@mapa.es

**Zulueta Casina, Jon**

Director Gerente, ATUNSA, P.I. LANDABASO, 48370 Bermeo, Vizcaya, Spain

Tel: +34 94 618 62 00, Fax: +34 94 618 61 28, E-Mail: jon@atunsa.com

**FRANCE (ST PIERRE & MIQUELON)****Haziza, Juliette \***

Chargée de mission des négociations thonières, Secrétariat d'Etat à la mer - Direction Générale des Affaires Maritimes, de la Pêche et de l'Aquaculture (DGAMPA), Tour Sequoia, 1 place Carpeaux, 92055 La Défense

Tel: +33 659 542 827, E-Mail: juliette.haziza@agriculture.gouv.fr; juliette.haziza@developpement-durable.gouv.fr

**GABON****Angueko, Davy**

Chargé d'Etudes du Directeur Général des Pêches, Direction Générale des Pêche et de l'Aquaculture, BP 9498, Libreville Estuaire

Tel: +241 6653 4886, E-Mail: davyangueko83@gmail.com; davyangueko@yahoo.fr

**GHANA****Antwi-Boadu, Fred Kwesi \***

Executive Director, Fisheries Commission Ghana, Ministry of Fisheries and Aquaculture Development, P. O. Box GP 630 Accra

Tel: +233 302 675 155, E-Mail: fred.antwi-boadu@fishcom.gov.gh

**Aihoon, Frank Kwesi**

Vice President Managing Director Ghana Tuna Association, Panofi Company Limited, 2nd Floor Park View Plaza, P.O. Box TT 581, Tema, Accra

Tel: +233 277 474 801, Fax: +233 303 206 101, E-Mail: faihoon@gmail.com

**Amarfio, Richster Nii Amarh**

Laif Fisheries Company Limited, TTV Building, Inner Fishing, P. O. Box TT416, Tema, Accra

Tel: +233 247 962 122, E-Mail: niirichster@gmail.com

**Bannerman, Paul**

Deputy Executive Director, Ministry of Fisheries and Aquaculture Development, Marine Fisheries Research Division, P.O. Box GP 630, GA 231 Tema

Tel: +233 244 794 859, E-Mail: paul.bannerman@fishcom.gov.gh; paulbann@hotmail.com

**Kwame Dovlo, Emmanuel**

Director, Fisheries Scientific Survey Division, P.O. Box GP 630, Tema, Accra

Tel: +233 243 368 091, E-Mail: emmanuel.dovlo@fishcom.gov.gh

**Quatey, Samuel Nii K.**

Technical Advisor, Ministry of Fisheries &amp; Aquaculture Development, P.O. Box GP 630, Accra

Tel: +233 543 077 358, E-Mail: samquatey@yahoo.com

**GUATEMALA****Lemus Godoy, Julio César \***

Director de Pesca, Ministerio de Agricultura, Ganadería y Alimentación - MAGA, Viceministerio de Sanidad Agropecuaria y Regulaciones - VISAR, Dirección de Normatividad de la Pesca y Acuicultura, Kilómetro 22, Ruta al Pacífico, Edificio "La Ceiba", 01064 Bárcena, Villa Nueva

Tel: +502 2413 7000 Ext. 9302, E-Mail: juliolemusdipescas@gmail.com; dipescaguatemala@gmail.com

**Chavarría Valverde, Bernal Alberto**

Asesor en Gestión y Política pesquera Internacional, DIPESCA, Bárcena

Tel: +506 882 24709, Fax: +506 2232 4651, E-Mail: bchavarría@lsg-cr.com

**Cobas Ecuris, Abraham <sup>1</sup>**

Atunera Sant Yago, S.A., 01064

**Martínez Valladares**, Carlos Eduardo

Encargado del Departamento de Pesca Marítima, Kilómetro 22, Ruta al Pacifico, Edificio la Ceiba 3er Nivel, 01064  
Bárcena, Villa Nueva  
Tel: +502 452 50059, E-Mail: carlosmartinez41331@gmail.com

**GUINEA (REP.)****Kaba**, Amara Camara \*

Directeur National de la Pêche Maritime, BP 307 Commune de Kaloum, Conakry  
Tel: +224 621 042 758, E-Mail: amaragbe1@yahoo.fr; sg.mpem@gouvernement.gov.gn

**Kolié**, Lansana

Chef de Division Aménagement, Ministère de la Pêche et de l'Economie maritime, 234, Avenue KA 042 - Commune de  
Kaloum BP: 307, Conakry  
Tel: +224 624 901 068, E-Mail: klansana74@gmail.com

**Sylla**, Fatoumata Saran

Directrice Nationale, Direction Nationale de la Pêche Maritime, Ministère de la Pêche et de l'Économie Maritime, BP 307  
Commune de Kaloum, 234, Avenue KA 042, Conakry  
Tel: +224 621 272 627, E-Mail: fatimaksylla@gmail.com; dnpmpguinee2000@gmail.com

**JAPAN****Ota**, Shingo \*

Special Advisor to the Minister of Agriculture, Forestry and Fisheries, 1-2-1 Kasumigaseki, Chiyoda-Ku, Tokyo 100-8907  
Tel: +81 3 3502 8460, Fax: +81 3 3504 2649, E-Mail: shingo\_ota810@maff.go.jp

**Katsuyama**, Kiyoshi <sup>1</sup>

Adviser, Japan Tuna Fisheries Co-operative Association, 2-31-1 Eitai Koto-ku, Tokyo 135-0034  
Tel: +81 3 5646 2382, Fax: +81 3 5646 2652, E-Mail: katsuyama@japantuna.or.jp; gyojyo@japantuna.or.jp

**Kawashima**, Tetsuya

Counsellor, Resources Management Department, Fisheries Agency of Japan, Chiyoda-ku, Tokyo 1008907  
Tel: +81 335 028 460, E-Mail: tetsuya\_kawashima610@maff.go.jp

**Kumamoto**, Jumpei

Technical Official, Fisheries Agency, Ministry of Agriculture, Forestry and Fisheries, International Affairs Division,  
Chiyoda-Ku, Tokyo 100-8907  
Tel: +81 3 3502 8460, Fax: +81 3 3504 2649, E-Mail: jumpei\_kumamoto270@maff.go.jp

**Miura**, Nozomu

Assistant Director, International Division, Japan Tuna Fisheries Co-operative Association, 2-31-1 Eitai Koto-ku, Tokyo  
135-0034  
Tel: +81 3 5646 2382, Fax: +81 3 5646 2652, E-Mail: miura@japantuna.or.jp; gyojyo@japantuna.or.jp

**Sato**, Katsuya

Assistant Director, International Affairs Division, Fisheries Agency of Japan, Chiyoda-ku, Tokyo 1008907  
Tel: +81 335 028 460, E-Mail: katsuya\_sato770@maff.go.jp

**Yoshida**, Hiroyuki

Deputy Director, Japan Tuna Fisheries Co-operative Association, 2-31-1 Eitai Koto-Ku, Tokyo  
Tel: +81 3 5646 2382, Fax: +81 5646 2652, E-Mail: yoshida@japantuna.or.jp

**KOREA (REP.)****Shim**, Soobin \*

Deputy Director, Ministry of Oceans and Fisheries, International Cooperation Division, Government Complex Bldg.5,  
Dasom 2-ro, 30110 Sejong  
Tel: +82 44 200 5333, Fax: +82 44 200 5349, E-Mail: sbin8shim@korea.kr

**Baek**, Sangjin

Assistant Manager, Korea Overseas Fisheries Association, 6th fl. Samho Center Bldg. "A" 83, Nonhyeon-ro, 06775 Seoul  
Seocho-gu  
Tel: +82 258 91614, Fax: +82 258 91610, E-Mail: sjbaek@kosfa.org

**Jeong**, Yoonkyung

Korea Overseas Fisheries Association, 6th fl. Samho Center Bldg "A" 83, Nonhyeon-ro, Seocho-gu, Seoul, 06775  
Tel: +82 258 91615, Fax: +82 258 91630, E-Mail: dbsrud1106@kosfa.org

**Kang, Seunggwon**

Assistant Manager, Dongwon Industries Co., Ltd., 68 Mabang-ro, Seocho-gu, 06775 Seoul  
Tel: +82 2 589 3684, Fax: +82 2 589 4397, E-Mail: veritasivy@dongwon.com; i3255@dongwon.com

**Park, Jinseok**

Deputy Director, Sajo Industries co., ltd, 107-39, TONGIL-RO, SEODAEMUNGU, 03740 Seoul  
Tel: +82 232 771 651; +82 102 857 1786, Fax: +82 2 365 6079, E-Mail: goodtime9@nate.com; goodtime9@sajo.co.kr

**Yang, Jae-geol**

Policy Analyst, Korea Overseas Fisheries Cooperation Center, 6th FL, S Building, 253, Hannuri-daero, 30127 Sejong  
Tel: +82 44 868 7364, Fax: +82 44 868 7840, E-Mail: jg718@kofci.org

**MAURITANIA****Camara, Lamine \***

Directeur/DARE/MPEM, Direction de l'Aménagement des Ressources et des Études, Ministère des Pêches et de l'Economie Maritime, BP: 137, NKTT/R.I., Nouakchott

Tel: +222 45 29 54 41; +222 46 41 54 98, E-Mail: laminecam2000@yahoo.fr

**Bouzouma, Mohamed El Moustapha**

Directeur Adjoint, Institut Mauritanien des Recherche Océanographique et des Pêches (IMROP), B.P 22, Nouadhibou  
Tel: +222 457 45124; +222 224 21 027, Fax: +222 45 74 51 42, E-Mail: bouzouma@yahoo.fr

**MEXICO****López Rasine, Gustavo Xicotencatl**

Jefe de Departamento con América Latina y el Caribe, Comisión Nacional de Acuicultura y Pesca (CONAPESCA), Av. Camarón Sábalo s/n esq. Tiburón, Fracc. Sábalo Country Club

Tel: +52 669 915 6900 Ext. 58422, E-Mail: guslora@yahoo.com; gustavo.lopez@conapesca.gob.mx

**Soler Benítez, Bertha Alicia**

Comisión Nacional de Acuicultura y pesca (CONAPESCA), Av. Camarón Sábalo 1210 Fracc. Sábalo Country Club., 82100 Mazatlán, Sinaloa

Tel: +52 669 915 6900 Ext. 58462, E-Mail: bertha.soler@conapesca.gob.mx; berthaa.soler@gmail.com

**MOROCCO****Abid, Nouredine**

Chercheur et ingénieur halieute au Centre Régional de recherche Halieutique de Tanger, Responsable du programme de suivi et d'étude des ressources des grands pélagiques, Centre régional de l'INRH à Tanger/M'dig, B.P. 5268, 90000 Drabed, Tangier

Tel: +212 53932 5134; +212 663 708 819, Fax: +212 53932 5139, E-Mail: nabid@inrh.ma

**Bensbai, Jilali**

Chercheur, Institut National de Recherche Halieutique à Casablanca - INRH/Laboratoires Centraux, Ain Diab près du Club équestre OULAD JMEL, Rue Sidi Abderrhman / Ain Diab, 20100 Casablanca

Tel: +212 661 59 8386, Fax: +212 522 397 388, E-Mail: bensbaijilali@gmail.com

**Haoujar, Bouchra**

Cadre à la Division de Durabilité et d'Aménagement des Ressources Halieutiques, Département de la Pêche Maritime, Nouveau Quartier Administratif, BP 476, 10150 Haut Agdal, Rabat

Tel: +212 253 768 8115, Fax: +212 537 688 089, E-Mail: haoujar@mpm.gov.ma

**Hassouni, Fatima Zohra**

Chef de la Division de Durabilité et d'Aménagement des Ressources Halieutiques, Département de la Pêche Maritime, Nouveau Quartier Administratif, B.P.: 476, 10150 Haut Agdal, Rabat

Tel: +212 537 688 122/21, Fax: +212 537 688 089, E-Mail: hassouni@mpm.gov.ma

**NICARAGUA****Barnuty Navarro, Renaldy Antonio**

Hidrobiólogo, Director - Dirección de Investigaciones Pesqueras - Instituto Nicaragüense de la Pesca y Acuicultura (INPESCA), Km 3.5 carretera Norte, Contiguo al edificio de la Big Cola, Managua

Tel: +505 22 4424 01 Ext. 140; +505 842 04110, E-Mail: rbarnutti@inpesca.gob.ni

**Chacón Rivas, Roberto Danilo**

Asesor Legal, Instituto Nicaragüense de la Pesca y Acuicultura (INPESCA), Reparto Villa Fontana, de semáforos de Club Terraza, 4 c. Oeste, 1 c. al Sur, 14174 Managua

Tel: +505 836 58644; +505 875 88114, Fax: +505 224 42460, E-Mail: rchacon@inpesca.gob.ni; rchaconr5@gmail.com

**Guevara Quintana, Julio César**

Comisionado CIAT - Biólogo, INPESCA, Reparto Villa Fontana, de semáforos de Club Terraza, 4 c. Oeste, 1 c. al Sur, 14174 Managua

Tel: +505 875 88114; +507 699 75100, E-Mail: juliocgq@hotmail.com; jguevara@inpesca.gob.ni

**PANAMA****Torrijos Oro, Flor \***

Administradora General de la ARAP, Ministerio de Desarrollo Agropecuario, Autoridad de los Recursos Acuáticos de Panamá, Edificio Riviera, Ave. Justo Arosemena, Calle 45 Bella Vista

Tel: +507 6671 1503; +507 511 60000 (ext. 205), E-Mail: ftorrijos@arap.gob.pa; administraciongeneral@arap.gob.pa

**Díaz de Santamaría, María Patricia**

Delegada representante de la Industria, FIPESCA - Fundación Internacional de Pesca, Zona de Libre Proceso de Corozal, Edificio 297, Corozal

Tel: +507 378 6640; +507 657 32047, E-Mail: mpdiaz@fipesca.com

**García, Génesis**

Captadora de datos, Autoridad de los Recursos Acuáticos de Panamá - ARAP, Dirección de Cooperación y Asuntos Pesqueros Internacionales, Ave. Justo Arosemena y Calle 45 Bella Vista, Edificio la Riviera

Tel: +507 511 6000 Ext. 301; +507 617 80430, E-Mail: ggarcia@arap.gob.pa

**Loinaz Eguiguren, Imanol**

OPAGAC, Polígono Industrial Landabaso, s/n - Edificio Albacora, 48370 Bermeo, Vizcaya, Spain

Tel: +34 94 618 7000, Fax: +34 94 618 6147, E-Mail: imanol.loinaz@albacora.es

**Pino, Yesuri**

Jefa encargada del Departamento de Evaluación de Recursos Acuáticos, Ministerio de Desarrollo Agropecuario, Autoridad de los Recursos Acuáticos de Panamá, Evaluación de los Recursos Acuáticos, Edificio Riviera, Ave. Justo Arosemena, Calle 45 Bella Vista, 05850

Tel: +507 511 6036, E-Mail: yesuri.pino@arap.gob.pa

**Vergara, Yarkelia**

Directora encargada de Cooperación y Asuntos pesqueros, Ministerio de Desarrollo Agropecuario, Autoridad de los Recursos Acuáticos de Panamá, Cooperación Técnica y Asuntos pesqueros Internacional, Edificio Riviera, Ave. Justo Arosemena, Calle 45 Bella Vista, 0819-02398

Tel: +507 511 6008 (ext. 359), E-Mail: yvergara@arap.gob.pa; hsf@arap.gob.pa

**PHILIPPINES****Demo-os, Marlo**

PFDA Fishport Complex, North Bay Boulevard North BFAR MCS Station and Fishing Tech Lab., 1411 Navotas NCR

Tel: +63 918 964 0454, E-Mail: mbdemoos@gmail.com

**Escobar Jr., Severino**

Bureau of Fisheries and Aquatic Resources - BFAR Central Office, Fisheries Building Complex, BPI Compound, Visayas Avenue, BRGY. Vasra, 1101 Quezon City

Tel: +639 178 017 237, Fax: +632 842 66532, E-Mail: jojo\_escobar@yahoo.com; slejr@yahoo.com

**Mabanglo, Maria Joy**

BPI Compound Brgy. Vasra Quezon City, 1128 Quezon City Metro Manila

Tel: +63 917 846 8050, E-Mail: mj.mabanglo@gmail.com

**Tabios, Benjamin F.S. Jr**

Assistant Director for Administrative Services, Bureau of Fisheries & Aquatic Resources, 4th Floor New BFAR Building, Visayas Avenue, Baranagay Vasra Diliman, 1104 Quezon City Metro Manila

Tel: +63 943 928 0034, Fax: +632 929 8390, E-Mail: btabios@bfar.da.gov.ph; benjotabios@gmail.com; tabios.bfar@yahoo.com.ph

**Viron, Jennifer**

Bureau of Fisheries and Aquatic Resources Central Office, Department of Agriculture, PCA Compound, Elliptical Road, Diliman, 1103 Quezon City Metro Manila

Tel: +639 294 296; +63 929 95 97; +63 929 80 74, E-Mail: jennyviron@bfar.da.gov.ph; jennyviron@gmail.com

**SAO TOMÉ AND PRÍNCIPE****Da Conceição, Ilair \***

Director das Pescas, Ministério da Agricultura, Desenvolvimento Rural e Pescas, Bairro 3 de Fevereiro - PB 59, Sao Tomé

Tel: +239 990 9315, Fax: +239 12 22 414, E-Mail: ilair1984@gmail.com

**SENEGAL**

**Diouf, Ibrahima**

Ingénieur des Pêches, Direction des Pêches Maritimes, Chef de la Division de la pêche industrielle, Diamniadio, Sphère ministérielle Ousmane Tanor DIENG, Immeuble D, 2e étage, BP 289 Dakar  
Tel: +221 541 4764, Fax: +221 338 602 465, E-Mail: ivesdiouf@gmail.com

**Eom, Seoho**

GRAND BLEU, Building Lahad Mblacke AV. Abdoulaye Fadiga, 3rd floor Block B 27102 DM, Dakar  
Tel: +221 781 795 764, Fax: +221 338 232 513, E-Mail: eom@grandbleusa.com

**Faye, Adama**

Directeur adjoint de la Direction de la Protection et de la Surveillance des pêches, Direction, Protection et Surveillance des Pêches, Cité Fenêtre Mermoz, BP 3656 Dakar  
Tel: +221 775 656 958, Fax: +221 338 602 465, E-Mail: adafaye2000@yahoo.fr

**Gueye, Assane**

Conseiller Technique auprès du Directeur, Direction de la Protection et de la Surveillance des Pêches (DPSP), Cité Fenêtres Mermoz – Dakar – Corniche Ouest, BP: 3656  
Tel: +221 776 342 953; +221 338 602 465, E-Mail: assaneg@hotmail.fr

**Kane Dème, Fatimata**

Juriste, Direction des Pêches maritimes / Ministère des Pêches et de l'Economie maritime, Chef du Bureau Législation et Suivi des Accords, Diamniadio, Sphère ministérielle Ousmane Tanor DIENG, Immeuble D, 2e étage, BP 289 Dakar  
Tel: +221 77 524 7232, Fax: +221 33 849 9883, E-Mail: fakanano@gmail.com; kanmetou@yahoo.fr

**Kim, Bo Seung Jason**

Nouveau Quai de Pêche – Mole 10, B.P: 782, 10200 Dakar  
Tel: +221 776 261841, E-Mail: bs1234577@dongwon.com

**Kwabena, Adams Blegnan <sup>1</sup>**

Chef d'équipe pêche, CAPSEN, 10200

**Lee, Jong Koo <sup>1</sup>**

GRAND BLEU S.A., Dakar

**Ndiaye, Ibrahima**

Chef d'entreprise, GRAND BLEU, Amitié 2 villa 4055, BP 27102 DM Dakar  
Tel: +221 774 501 352, E-Mail: spiderndiaye@yahoo.fr

**Park, Seolmin**

Nouveau Quai de Pêche – Môle 10, B.P: 782, Dakar  
Tel: +221 773 828 539, E-Mail: psm@dongwon.com

**Sèye, Mamadou**

Ingénieur des Pêches, Chef de la Division Gestion et Aménagement des Pêcheries de la Direction des Pêches maritimes, Sphère ministérielle de Diamniadio Bâtiment D., 1, Rue Joris, Place du Tirailleur, 289 Dakar  
Tel: +221 77 841 83 94, Fax: +221 821 47 58, E-Mail: mdseye@gmail.com; mdseye1@gmail.com; mdouseye@yahoo.fr

**Sow, Fambaye Ngom**

Chercheur Biologiste des Pêches, Centre de Recherches Océanographiques de Dakar Thiaroye, CRODT/ISRA, LNERV - Route du Front de Terre - BP 2241, Dakar  
Tel: +221 3 0108 1104; +221 77 502 67 79, Fax: +221 33 832 8262, E-Mail: ngomfambaye2015@gmail.com; famngom@yahoo.com

**Wade, Mohamadou Samassa**

GRAND BLEU S.A., Avenue Abdoulaye Fadiga, Immeuble Abdou Lahat Mbacké, Indépendance Immobilière, Porte B, 3 étage, 27102  
Tel: +221 77 380 94 36, E-Mail: wade@grandbleusa.com

**SOUTH AFRICA**

**Qayiso Kenneth, Mketsu \***

Deputy Director, Department of Forestry, Fisheries and the Environment, 3 Martin Hammerschlag Way, Private Bag X2, Foretrust Building, Foreshore, 8018 Cape Town  
Tel: +27 21 402 3048, Fax: +27 21 402 3618, E-Mail: QMketsu@dffe.gov.za; qaiso.mketsu@gmail.com

**McDonald, Alice**  
802 Clothiers Creek Rd, 2484 NSW, Clothiers Creek, Australia  
Tel: +624 304 76034, E-Mail: alice@nrepeople.com.au

**Pheeha, Saasa**  
Chief Director, Marine Resource Management (Acting), Department of Agriculture, Forestry and Fisheries, Foretrust Building, 9 Marting Hammerschalg Way, Foreshore 8000, Private Bag X2, Cape Town  
Tel: +27 21 402 3563; +27 825 585 837, Fax: +27 21 402 3618, E-Mail: spheeha@dffe.gov.za

#### **TRINIDAD AND TOBAGO**

**Edghill, Jaime-Leigh**  
Ministry of Agriculture, Land & Fisheries, Fisheries Division - Marine Fisheries Analysis Unit, Western Main Road, Chaguaramas, St. George  
Tel: +1 868 623 6028, Fax: +1 868 623 8542, E-Mail: Jaime-Leigh.Edghill@gov.tt

**Martin, Louanna**  
Fisheries Officer, Ministry of Agriculture, Land & Fisheries, Fisheries Division, Compound Western Main Road, St George  
Tel: +868 634 4504; 868 634 4505, Fax: +868 634 4488, E-Mail: lmartin@gov.tt; lmartin@fp.gov.tt; louannamartin@gmail.com

**Mohammed, Elizabeth**  
Acting Director of Fisheries, Ministry of Agriculture, Land and Fisheries, Fisheries Division, #35 Cipriani Boulevard Port of Spain, West Indies  
Tel: +868 625 9358, Fax: +868 623 8542, E-Mail: emohammed.2fdtt@gmail.com

#### **UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND**

**Keedy, Jess \***  
Joint Head, International Fisheries, Marine & Fisheries, Department for Environment, Food and Rural Affairs (Defra), Marine & Fisheries Directorate, First Floor, Seacole Wing, 2 Marsham Street, London SW1P 3JR  
Tel: +44 755 724 5171; +44 208 026 63350, E-Mail: jess.keedy@defra.gov.uk

**Christopher, Abbi E**  
Asst Fisheries Officer, Department of Agriculture and Fisheries, Government of the Virgin Islands, Fisheries Management Division, Paraquita Bay, Tortola, VG1120, Virgin Islands  
Tel: +284 468 6146, E-Mail: AeChristopher@gov.vg

**Duncan, Darren**  
Head of Division for Agriculture, Forestry, Fisheries and Biosecurity, STH 1ZZ Jamestown, St Helena  
Tel: +44 290 24724, Fax: +44 290 24603, E-Mail: Darren.Duncan@sainthelena.gov.sh

**Joseph, Thecla S.**  
Director, Fisheries and Marine Resource Management, Turks and Caicos, #176 South Dock Road, TKCA 1ZZ Providenciales, Turks and Caicos Islands  
Tel: +1 649 342 4862, E-Mail: tsjoseph@gov.tc

**Lockhart, Katty**  
Assistant Director Fisheries, Department of Fisheries and Marine Resources Management, Turks & Caicos Islands  
Tel: +1 649 241 1950, E-Mail: klokhart@gov.tc; kglockhart@hotmail.com

**Owen, Marc**  
Team Lead, International Fisheries, Department for Environment, Food and Rural Affairs, Defra, First Floor, Seacole Wing, 2 Marsham Street, London SW1P 4DF  
Tel: +44 755 732 5524, E-Mail: marc.owen@defra.gov.uk

**Plumridge, Katie**  
DEFRA, 2 Marsham Street, London SW1P 4DF  
Tel: +44 734 109 7549, E-Mail: katie.plumridge@defra.gov.uk

**Sampson, Harry**  
Senior International Fisheries Policy Officer, Department for Environment, Food and Rural Affairs (Defra), Marine & Fisheries Directorate, Nobel House 17 Smith Square, London SW1P 3JR  
Tel: +44 208 026 4403; +44 755 742 8543, E-Mail: harry.sampson@defra.gov.uk; trfmo@defra.gov.uk

**Smith-Claxton, Tessa**

Assistant Secretary, Department of Agriculture and Fisheries, Government of the Virgin Islands, Fisheries and Agriculture, Paraquita Bay, Tortola, VG1120 British Virgin Islands Tortola, Virgin Islands  
Tel: (284) 468-9713, E-Mail: tesmith@gov.vg

**Townley, Luke**

International Fisheries Policy Officer, Department for Environment, Food and Rural Affairs (Defra), Marine & Fisheries Directorate, Horizon House, Deanery Road, Bristol BS1 5AH  
Tel: +44 782 782 4514, E-Mail: luke.townley@defra.gov.uk

**Warren, Tammy M.**

Senior Marine Resources Officer, Department of Environment and Natural Resources, Government of Bermuda, #3 Coney Island Road, St. George's, CR04, Bermuda  
Tel: +1 441 705 2716, E-Mail: twarren@gov.bm

**Wright, Serena**

Fisheries Scientist, Centre for Environment, Fisheries and Aquaculture Science (Cefas), ICCAT Tagging Programme, St Helena, Pakefield Road, Lowestoft NR33 0NG  
Tel: +44 1502 52 1338; +44 797 593 0487, E-Mail: serena.wright@cefas.co.uk

**UNITED STATES****Kryc, Kelly \***

U.S. Federal Government Commissioner to ICCAT and Deputy Assistant Secretary for International Fisheries, Office of the Under Secretary for Oceans and Atmosphere, National Oceanic and Atmospheric Administration (NOAA); Department of Commerce, 1401 Constitution Ave, Washington D.C. 20230  
Tel: +1 202 961 8932; +1 202 993 3494, E-Mail: kelly.kryc@noaa.gov

**Blankenbeker, Kimberly**

Foreign Affairs Specialist, Office of International Affairs, Trade, and Commerce (F/IATC), NOAA, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, Maryland 20910  
Tel: +1 301 427 8357, Fax: +1 301 713 1081, E-Mail: kimberly.blankenbeker@noaa.gov

**Blankinship, David Randle**

Chief, Atlantic Highly Migratory Species Management Division, NOAA - National Marine Fisheries Service, 263 13th Ave South, Saint Petersburg, Florida 33701  
Tel: +1 727 824 5313, Fax: +1 727 824 5398, E-Mail: randy.blankinship@noaa.gov

**Bogan, Raymond D.**

Alternate U.S. Recreational Commissioner, Sinn, Fitzsimmons, Cantoli, Bogan, West and Steuerman, 501 Trenton Avenue, P.O. Box 1347, Point Pleasant Beach, Sea Girt, New Jersey 08742  
Tel: +1 732 892 1000; +1 732 233 6442, Fax: +1 732 892 1075, E-Mail: rbogan@lawyernjshore.com

**Brothen, Tanya**

Foreign Service Officer, Office of Marine Conservation (OES/OMC), U.S. Department of State, Rm 2758, 2201 C Street NW, Washington D.C. 20520-7878  
Tel: +1 202 647 4000, E-Mail: brothentr@state.gov

**Cass-Calay, Shannon**

Director, Sustainable Fisheries Division, Southeast Fisheries Science Center, NOAA, National Marine Fisheries Service, 75 Virginia Beach Drive, Miami, Florida 33149  
Tel: +1 305 361 4231, Fax: +1 305 361 4562, E-Mail: shannon.calay@noaa.gov

**Clarke, Raymond**

P.O. Box 463, Waialua 96791  
Tel: +1 808 722 0486, E-Mail: ray.clarke@bumblebee.com

**Delaney, Glenn Roger**

Alternate U.S. Commercial Commissioner, 601 Pennsylvania Avenue NW Suite 900 South Building, Washington D.C. 20004  
Tel: +1 202 434 8220, Fax: +1 202 639 8817, E-Mail: grdelaney@aol.com

**Díaz, Guillermo**

NOAA-Fisheries, Southeast Fisheries Science Center, 75 Virginia Beach Drive, Miami, Florida 33149  
Tel: +1 305 361 4227; +1 305 898 4035, E-Mail: guillermo.diaz@noaa.gov

**Golet, Walter**

School of Marine Sciences, The University of Maine/Gulf of Maine Research Institute, 350 Commercial Street, Portland, Maine 04101-4618

Tel: +1 207 228 1671, E-Mail: walter.golet@maine.edu

**Hemilright, Francis Dewey**

P.O. Box 667, Wanchese, North Carolina 27981

Tel: +1 252 473 0135, E-Mail: dewey.hemilright@gmail.com; fvtarbaby@embarqmail.com

**King, Melanie Diamond**

Foreign Affairs Specialist, Office of International Affairs Trade, and Commerce (F/IATC), NOAA, National Marine Fisheries Service, 1315 East-West Highway, Silver Spring, Maryland 20910

Tel: +1 301 427 3087, E-Mail: melanie.king@noaa.gov

**Park, Caroline <sup>1</sup>**

NOAA Office of the General Counsel for Fisheries, Silver Spring, Maryland 20910

**Redd Jr, Larry**

Fishery Management Specialist, NOAA - National Marine Fisheries Service, Highly Migratory Species Management Division, Office of Sustainable Fisheries, 1315 East-West Highway, Building SSMC3, Silver Spring, Maryland 20910

Tel: +1 301 427 8543, E-Mail: larry.redd@noaa.gov

**Sissenwine, Michael P.**

Marine Policy Center, Woods Hole Oceanographic Institution, 39 Mill Pond Way, East Falmouth, Massachusetts 02536

Tel: +1 508 566 3144, E-Mail: m.sissenwine@gmail.com

**Weber, Richard**

South Jersey Marina, 1231 New Jersey 109, Cape May, New Jersey 08204

Tel: +1 609 884 2400; +1 609 780 7365, Fax: +1 609 884 0039, E-Mail: rweber@southjerseymarina.com

**Yanoff, Callan**

Foreign Affairs Officer, Office of Marine Conservation (OES/OMC), U.S. Department of State, Rm 2758, 2201 C Street NW, Washington D.C. 20520-7878

Tel: +1 301 356 6822, E-Mail: yanoffcj@state.gov

**URUGUAY****Domingo, Andrés \***

Dirección Nacional de Recursos Acuáticos - DINARA, Laboratorio de Recursos Pelágicos, Constituyente 1497, 11200 Montevideo

Tel: +5982 400 46 89, Fax: +5982 401 32 16, E-Mail: dimanchester@gmail.com

**VENEZUELA****Evaristo, Eucaris del Carmen**

Ministerio del Poder Popular de Pesca y Acuicultura, Corresponsal del Atlántico, Parque Central, Torre Este, piso 17, Caracas

Tel: +58 416 883 3781, E-Mail: eucarisevaristo@gmail.com

**Arocha, Freddy**

Asesor Científico, Instituto Oceanográfico de Venezuela, Universidad de Oriente, A.P. 204, 6101 Cumaná Estado Sucre

Tel: +58 424 823 1698; +58 412 692 8089, E-Mail: farochap@gmail.com

***OBSERVERS FROM COOPERATING NON-CONTRACTING PARTIES, ENTITIES, FISHING ENTITIES*****BOLIVIA****Alsina Lagos, Hugo Andrés**

Asesor, Unidad Boliviana de Pesca Marítima (UBPM), Calle 20 de octubre 2502, esq. Pedro Salazar, La Paz

Tel: +1 321 200 0069, Fax: +507 830 1708, E-Mail: hugo@alsina-et-al.org

**Cortez Franco, Limbert Ismael**

Jefe de Unidad, Unidad Boliviana de Pesca Marítima (UBPM), Calle 20 de octubre 2502, esq. Pedro Salazar, La Paz

Tel: +591 6 700 9787, Fax: +591 2 291 4069, E-Mail: limbert.cortez@protonmail.ch; limbert.cortez@mindef.gob.bo; licor779704@gmail.com

**CHINESE TAIPEI****Chou, Shih-Chin**

Section Chief, Deep Sea Fisheries Division, Fisheries Agency, 8F, No. 100, Sec. 2, Heping W. Rd., Zhongzheng Dist., 10060  
Tel: +886 2 2383 5915, Fax: +886 2 2332 7395, E-Mail: shihcin@ms1.fa.gov.tw; chou1967sc@gmail.com

**Huang, An-Chiang**

Coordinator, Fisheries Agency, 8F., No.100, Sec. 2, Heping W. Rd., Zhongzheng Dist., 10060  
Tel: +886 2 238 35911, Fax: +886 2 233 27395, E-Mail: hac7222@gmail.com; anchiang@ms1.fa.gov.tw

**Kao, Shih-Ming**

Associate Professor, Graduate Institute of Marine Affairs, National Sun Yat-sen University, 70 Lien-Hai Road, 80424  
Kaohsiung City  
Tel: +886 7 525 2000 Ext. 5305, Fax: +886 7 525 6205, E-Mail: kaosm@mail.nsysu.edu.tw

**Yang, Shan-Wen**

Secretary, Overseas Fisheries Development Council, 3F., No. 14, Wenzhou Street, Da'an Dist., 10648  
Tel: +886 2 2368 0889 #151, Fax: +886 2 2368 6418, E-Mail: shenwen@ofdc.org.tw

**COSTA RICA****Álvarez Sánchez, Liliana**

Funcionaria de la Oficina Regional del Caribe – Limón, Instituto Costarricense de Pesca y Acuicultura, 4444  
Tel: +506 863 09387, Fax: +506 263 00600, E-Mail: lalvarez@incopeca.go.cr

**Pacheco Chaves, Bernald**

Instituto Costarricense de Pesca y Acuicultura, INCOPECA, Departamento de Investigación, Cantón de Montes de Oro,  
Puntarenas, 333-5400  
Tel: +506 899 22693, E-Mail: bpacheco@incopeca.go.cr

**SURINAME****Rampersad, Tania Tong Sang \***

Senior Policy Officer - Fisheries Department, Ministry of Agriculture, Animal Husbandry and Fisheries, Cornelis  
Jongbawstraat # 50, Paramaribo, Republic of Suriname  
Tel: +597 472 233, Fax: +597 424441, E-Mail: tareva@hotmail.com

**OBSERVERS FROM INTERGOVERNMENTAL ORGANIZATIONS****CONFÉRENCE MINISTÉRIELLE SUR LA COOPÉRATION HALIEUTIQUE ENTRE LES ETATS AFRICAINS RIVERAINS DE L'OCÉAN ATLANTIQUE - COMHAFAT****Benabbou, Abdelouahed**

Secrétaire exécutif, Conférence Ministérielle sur la Coopération Halieutique entre les États Africains Riverains de  
l'Océan Atlantique/COMHAFAT, 2, Rue Beni Darkoul, Ain Khalouiya - Souissi, 10220 Rabat, Morocco  
Tel: +212 669 281 822, Fax: +212 537 681 810, E-Mail: benabbou.comhafat@gmail.com; secretariat@comhafat.org

**Amandè, Monin Justin**

Directeur, African Marine Expertises (AMEXPART), Cocody II Plateaux Aghien 01BP3012, Abidjan, Côte d'Ivoire  
Tel: +225 059 27927, E-Mail: m.amande@africanmarineexpertises.com; monin.amande@yahoo.fr

**Ishikawa, Atsushi**

COMHAFAT, N° 2, Rue Beni Darkoul, Ain Khalouiya - Souissi, 10080 Rabat, Morocco  
Tel: +212 642 96 66 72, Fax: +212 530 77 42 21, E-Mail: a615@ruby.ocn.ne.jp

**Laamrich, Abdennaji**

Advisor, COMHAFAT, 2, Rue Ben Darkoul, Ain Khalouia, Souissi, 10220 Rabat, Morocco  
Tel: +212 530 77 42 21; +212 661 224 794, Fax: +212 537 681 810, E-Mail: laamrichmpm@gmail.com;  
laamrich@comhafat.org

**OBSERVERS FROM NON-GOVERNMENTAL ORGANIZATIONS****ASSOCIAÇÃO DE CIÊNCIAS MARINHAS E COOPERAÇÃO - SCIAENA****Blanc, Nicolas**

Incubadora de Empresas da Universidade do Algarve, Campus de Gambelas, Pavilhão B1, 8005-226 Faro, Portugal  
Tel: +351 917 018 720, E-Mail: nblanc@sciaena.org

**BRAZILIAN ASSOCIATION OF FISH INDUSTRIES - ABIPESCA****Gund, Jairo**ABIPESCA, SGAN 601 bloco H ed. ION, sala 20S1, 70830-010 Brasilia, D.F., Brazil  
Tel: +55 479 693 1270, E-Mail: jairogund@gmail.com**Pestana, Lais**ABIPESCA, SGAN 601 bloco H Ed. ION, 70830-010 Brasilia, DF, Brazil  
Tel: +55 489 844 75135, E-Mail: lais@abipesca.com.br; laisbelsito@gmail.com**EUROPÊCHE****Jourdain, Jérôme**

Secrétaire général adjoint, Union des Armateurs à la Pêche de France (UAPF), Rue des Senneurs, 29900 Concarneau, France

Tel: +33 298 704 508; +33 663 981 436, E-Mail: jj@uapf.org

**Mattlet, Anne-France**<sup>1</sup>

Europêche, 1000 Brussels, Belgium

**INTERNATIONAL SEAFOOD SUSTAINABILITY FOUNDATION - ISSF****Restrepo, Víctor**

Chair of the ISSF Scientific Advisory Committee, International Seafood Sustainability Foundation, 3706 Butler Street, Suite 316, Pittsburgh PA 15201-1802, United States

Tel: + 1 305 450 2575; +1 703 226 8101, Fax: +1 215 220 2698, E-Mail: vrestrepo@iss-foundation.org; vrestrepo@mail.com

**THE INTERNATIONAL POLE & LINE FOUNDATION - IPNLF****Bealey, Roy**

IPNLF, 7-14 Great Dover Street, London SE1 4YR, United Kingdom

Tel: +44 755 537 3675, E-Mail: roy.bealey@ipnlf.org

**Dyer, Emilia**

IPNLF, 1 London Street, Reading, Berkshire RG1 4QW, United Kingdom

Tel: +44 745 512 0898, E-Mail: emilia.dyer@ipnlf.org

**Rodrigues, Luis**

IPNLF, United Kingdom

Tel: +351 914 131 674, E-Mail: luismramosrodrigues@gmail.com

**THE OCEAN FOUNDATION****Bohorquez, John**

The Ocean Foundation, 1320 19th St, NW, Suite 500, Washington DC 20036, United States

Tel: +1 202 887 8996, E-Mail: jbohorquez@oceanfdn.org

**TURKISH MARINE RESEARCH FOUNDATION - TUDAV****Öztürk, Bayram**

Director, Turkish Marine Research Foundation (TUDAV), Yaliköy mah. No:34/5 Beykoz, Istanbul, Türkiye

Tel: + 90 216 424 0772, Fax: +90 216 424 0771, E-Mail: ozturkb@istanbul.edu.tr

**WORLDWIDE FUND FOR NATURE - WWF****Buzzi, Alessandro**

WWF Mediterranean, Via Po, 25/c, 00198 Rome, Italy

Tel: +39 346 235 7481, Fax: +39 068 413 866, E-Mail: abuzzi@wwfmedpo.org

**OTHER PARTICIPANTS****SCRS CHAIRMAN****Brown, Craig A.**

SCRS Chairman, Sustainable Fisheries Division, Southeast Fisheries Science Center, NOAA, National Marine Fisheries Service, 75 Virginia Beach Drive, Miami, Florida 33149, United States

Tel: +1 305 586 6589, E-Mail: craig.brown@noaa.gov

\*\*\*\*\*

**ICCAT Secretariat**

C/ Corazón de María 8 – 6th floor, 28002 Madrid – Spain  
Tel: +34 91 416 56 00; Fax: +34 91 415 26 12; E-mail: info@iccat.int

**Manel**, Camille Jean Pierre  
**Neves dos Santos**, Miguel  
**Ortiz**, Mauricio  
**Palma**, Carlos  
**Kimoto**, Ai  
**Cheatle**, Jenny  
**Parrilla Moruno**, Alberto Thais  
**De Andrés**, Marisa  
**Campoy**, Rebecca  
**Motos**, Beatriz  
**Peyre**, Christine  
**Baity**, Dawn  
**Fiz**, Jesús  
**Idrissi**, M'Hamed  
**Peña**, Esther  
**Samedy**, Valérie

**ICCAT INTERPRETERS**

**Baena Jiménez**, Eva J.  
**Fleming**, Jack  
**Hof**, Michelle Renée  
**Liberas**, Christine  
**Linaae**, Cristina  
**Pinzon**, Aurélie

**Statement from Belize, Curaçao, El Salvador, Guatemala,  
Nicaragua, and Panama at the opening of the Third Intersessional Meeting of Panel 1**

The delegations of Belize, Curaçao, El Salvador, Guatemala, Nicaragua and Panama assume with the highest priority and the greatest commitment, the discussions that take place in ICCAT Panel 1 during the meetings that have been convened during the intersessional period of this year 2023. In that framework, we recognize the complexity of the pending decision issues for the updating of the tropical tuna management measures that should be in effect as of January 2024. For our delegations, an extension of the current measures is not a valid option, given the need to revitalize the bigeye tuna rebuilding program and adjust it to the needs and conditions of the resource, as well as to the rights and aspirations of developing States.

The discussions that have taken place in the year 2023, during the past meetings and the consultations by correspondence, show that the members of Panel 1 are clearly equipped with the tools for making short-, medium- and long-term decisions; furthermore, those discussions reveal that there is an environment conducive to reach consensus. However, the year is irremediably shortening and it is time to adopt a clear path that allows for such a consensus.

There are two fundamental issues to be resolved at the meeting that has been convened this June: the determination of the TAC and its distribution. The other pending issues will be easier to deal with.

The revision and adoption of a TAC adjusted to the available scientific information is the gateway to the solution of the problem. The Panel has mostly converged in the will to increase the TAC to 73,000 t, a figure that generates a probability of recovery of bigeye tuna greater than 65% for the year 2034 and which is considered sufficiently conservative and precautionary.

After the adoption of the TAC, a mechanism for the distribution of fishing possibilities must be agreed upon. If the TAC increase is successfully adopted, it provides the necessary space for developing States to have their needs met as they build their fishing capacity, while the Commission manages to grant equity to a system of distribution of fishing possibilities that has been discriminatory in favor of large catchers. The position expressed by some of the Members of Panel 1 do not take into account the interests of developing States, which should be prioritized for reaching a future consensus, as stipulated by the Agreement, the current Recommendation and the International Law; however, it will be necessary at the next meeting to explore with greater creativity the alternatives that would allow: a) the distribution of fishing rights for the current large catchers in accordance with their real and own fishing capacity; b) the consensus of the recognition of the rights to better catches for countries with historical catches of less than 3,500 t; and c) the need not to impose limitations on countries with catches of less than 1,000 t, as long as they do not exceed that threshold and the evolution of catches is analyzed. If to these principles we can add the gradualness of the adjustments, we could agree on a mechanism that facilitates a better distribution of the burden among the members with legitimate interests to participate in the tropical tuna fishery, especially bigeye tuna.

The natural rule that nothing is agreed until everything is agreed gives us guarantees to move on to discussions of no less importance, but which cannot compromise the adoption of essential definitions such as those described above; however, it will be important to concentrate on the adoption of a management measure of clear, transparent, simple and precise application, which is why the Panel 1 should concentrate on the essentials.

For our delegations, it should be recognized that the management measures adopted since 2019 have produced a positive effect and as long as the indicators do not indicate otherwise, with the relevant caution, the imposition of more burdens should not be exacerbated, but even moderated, as is the case of the already excessive 72-day FAD fishing closure in the Atlantic Ocean.

Finally, we believe that in the perspective of building the whole, we could confuse the essential. It is clear that the current measure contains indispensable control rules that must be analyzed and strengthened, but in this process we must avoid the introduction of aspects such as the Regional Registry of FADs and the

Regional Observer Program, which should be reserved for an indispensable parallel discussion, but which should not overburden the already complex work that we are committed to successfully accomplish. We hope that these issues will allow for a high and calm discussion.

List of requests to the SCRS relevant to the management of tropical tunas

No.	Request	Origin	Comments
<b>Analysis of (trends in) composition of catches</b>			
1	Analyse the percentage of juveniles in the catches of purse seiners fishing under FADs and those not using FADs at least for a given period.	Raised by CPC at Panel 1 June 2023 (Morocco).	This question is not clear because all purse seiners targeting tropical tunas fish using FADs.
2	Summarise adult and juvenile catch by gear and whether on FOBs/FADs. - Provide data on catches on FOBs/FADs vs. catches on free schools/other. - Update responses provided at June PA1 Intersessional Meeting to include 2020 and 2021 data (to consider the periods where the full time/area closure was in place). - Provide analysis by weight and by number of fish.	Question raised by CPC at Panel 1 June 2023 (Curaçao/Gabon; additional questions in bullets from the UK).	We understand that this question refers to ALL gears and fishing modes, not only purse seine. The Commission should know the assessment of juvenile catches in order to assess the need for amendment of existing measures.
3	Conduct a comparative analysis of the contribution of all fishing gears to the mortality of tropical tunas (over a time period which, if the data allow, show the effect of the development of the DFAD fishery) which shall include both absolute and relative contributions. This shall, where possible, be broken down into adult and juvenile mortality, by weight and by number of fish. The comparative analysis shall also assess the potential effects of foreseeable changes in selectivity on other species in the event of additional measures aimed at reducing catches of juvenile in tropical tuna fisheries.	Suggested by UK.	<p>The aim of making this request is to ensure a comprehensive request regarding (trends in) catch composition. There is some overlap with the questions from Morocco, Curaçao, and Gabon).</p> <p>Given the indication that there is some overlap in the proposals, and that the SCRS Chair has called for clarity as regards what is required by Panel 1, all the issues should be incorporated into a single question that encompasses the requirements of all the proponents. In this regard it should be kept in mind that:</p> <p>As most tropical tuna fisheries are multi-species, we consider that this study should cover the four tropical tuna stocks, not just bigeye tuna, and take into account the impacts of all fisheries/fishing modes on these stocks. As bigeye tuna represents between 5-12% of the purse seine fishery catches, only assessing the impact on bigeye tuna is not very informative. For this reason, question 3.b should be included.</p>

3b	<p>Prospects of the effects on other species of foreseeable change in selectivity in the event of additional restrictions on the juvenile catch in tropical tuna fisheries.</p> <p>Assess and compare the merits and shortcomings of management measures based on output (e.g., catch) and input control (e.g., effort, capacity...) from both a scientific and MCS perspectives.</p>		
<b>Impact of harvesting juveniles on stocks and yields</b>			
4	<p>What is the annual percentage of catches of BET juveniles (less than 3 years of age) between 2014-2016?</p> <p>If the BET fishery takes XX% of its TAC in juveniles (less than 3 years of age) and the remainder as adults, does this have lower future yields (10-year projection) than a BET fishery that took YY% juveniles (less than 3 years of age) with the remainder being adults?</p> <ul style="list-style-type: none"> <li>- Use the mean 2014-2016 percentage of catches of juveniles (less than 3 years of age) as the XX%. For the YY% in targets, use half the amount of the XX% value. Please assume management to 60% probability of being in the green quadrant of the Kobe matrix at the end of the 10-year projection.</li> </ul> <p>Using an annual of 70,000 t for the BET fishery, what would be the <math>F/F_{MSY}</math> and the <math>B/B_{MSY}</math> over the first 10 years of the projections in scenario 1 (juvenile percentage is XX%) versus scenario 2 (juvenile percentage is YY%)?</p>	<p>Question raised by CPC at the Panel 1 meeting in June 2023 (Canada).</p>	<p>We consider that these questions are not clear and could put the SCRS in a position of giving an opinion outside of its remit. The SCRS can carry out an analysis and submit information to the Commission on the impact on MSY of different levels of fishing for juvenile fish, but not express an opinion on that impact. That is up to the Commission. Since an objective has not been established, we consider that these questions are not appropriate and could put the SCRS in a delicate situation.</p> <p>We consider the first question to be imprecise because it does not quantify what "predominantly" is (20%, 40%, 60%, 80%). For this reason, we request that the SCRS answer question 4 b) below.</p> <p>The second question contains the same imprecision since "mainly of juveniles in number" is not defined.</p> <p>The third question is a factor of risk not described in the context of the question and the SCRS is not called on to weigh up management risks.</p>

4b	Evaluate whether the proposed TAC (73,000 t) may represent a risk in terms of future exploitation of the bigeye stock, assuming various selectivity scenarios (projecting the catch allocation proposals on the table and other intermediate scenarios, depending on recent selectivity).	Suggested by Central America and Curaçao group.	
5	Quantify the impact on maximum sustainable yield (MSY) and $SSB_{MSY}$ for tropical tunas resulting from different catch scenarios for the major fishing gear types (e.g. longline, DFAD fisheries, AFAD fisheries, purse seine on free school, other fisheries). Provide this based on both changes over a given time period and for potential different future catch scenarios. This shall include analysis of the impacts on both target and bycatch species.	Suggested by UK.	<p>The aim is to provide a clear indication of how MSY and <math>SSB_{MSY}</math> are affected by changes in levels of utilisation of different gear types.</p> <p>There is some overlap with the question posed by Canada.</p> <p>Although complementarity of the questions could be identified and not necessarily an overlap, we consider that the SCRS should not be restricted to the information provided by any CPC.</p> <p>We consider that this question is better framed, and should replace the previous one. However, we consider that this study should not contemplate the substitution of one gear for another, but rather different catch scenarios for the different fishing gears.</p> <p>In addition, the feasibility of substitution of these catches and the impacts that this substitution could have on other target or bycatch species of the fisheries affected (those that receive or lose catches) must be analyzed.</p> <p>As noted previously, we do not see the interest for the Commission in treating bigeye tuna in isolation, without evaluating the collateral damage (impacts) that the adoption of measures by the Commission may have, based on the information provided by the SCRS.</p>

6	Assess the impact that different levels of reduction in catches of each of the respective age classes of BET would have on the BET MSY as well as the consequences on tropical tuna catches as a whole.	Received from the EU on 5 July 2023. Updated 12 July.	<p>Recognise this question is similar to 4 but is slightly more specific.</p> <p>We agree that this assessment should be conducted for the four tropical tuna stocks, and the potential impacts of the different scenarios explored on other species, target and bycatch should be evaluated.</p>
6bis	Assess whether there is a specific period/spatial element of FAD closure that would particularly benefit juveniles.		
<b>Advice on the appropriateness of measures to reduce juvenile catches</b>			
7	Analyse the assessment of the impact of the current closure of the FAD fishery (72 days) across the Atlantic on the recovery of the bigeye tuna stock during the most recent period (beyond 2019).	Question raised by CPC at Panel 1 meeting in June 2023 (Morocco).	<p>This and question 7 are similar to questions 17.25 &amp; 17.29 in the Responses to the Commission which were to review and if required revise the FAD closure period and to assess the efficacy of the full closure period.</p> <p>It may be useful for these questions to be reconsidered and utilise more recent data.</p> <p>We consider that this impact cannot be assessed independently of the impact of other measures, such as the bigeye TAC and other measures. Only what was not caught during the closure days can be assessed, taking into account historical data.</p> <p>However, taking into account that the effort levels have changed considerably throughout the historical series, we consider it essential that the SCRS present capacity estimates for the different fleets targeting tropical tunas, and their evolution in recent years.</p> <p>This could be done following the IATTC model for purse seine (cubic meters of hold (or GT in its absence) of purse seine vessels multiplied by the days of activity/fishing in each year) and a similar one for other fishing gears (longline, pole and line, etc.); or estimation of total number of fishing days for surface fisheries and of hooks for longline fisheries, representing the total activity each year.</p>

			<p>Capacity trends are important for assessing the potential impacts of each fishery in the future, and the potential impacts of changes in management measures.</p> <p>This is something that the WCPFC evaluates, using various scenarios for its projections, and we consider that it is something that the SCRS should do as well (ref. <a href="#">SC19-MI-WP-08_CMM_eval_update_table_9_Hamer_et_al.pdf</a>).</p>
8	<p>Consider the efficacy of different DFAD management options, in particular limits on FAD sets and DFAD closures (including the area, period and other details), with the objective of achieving a high probability of reducing fishing mortality of juvenile tropical tuna, in particular bigeye and yellowfin tuna. If the SCRS concludes that it does not currently possess access to sufficient scientific data to provide this analysis to the Commission, it shall provide advice on the data necessary for science-based analysis.</p> <p>In producing this analysis, the SCRS shall take into account, inter alia:</p> <ul style="list-style-type: none"> <li>a) available fisheries data including differentiating between FAD and non-FAD fishing;</li> <li>b) experiences of implementing similar management measures with similar objectives, from other RFMOs; and</li> <li>c) fishing behaviours/patterns, both historically and those anticipated as a consequence of the implementation of any new management measures including the time/area closure.</li> </ul>	Suggested by UK.	<p>Aim is to ensure a comprehensive request is given to the SCRS.</p> <p>There is some overlap with the question posed by Morocco.</p> <p>This is similar to questions 17.25 &amp; 17.29 (see response above) and is also covered by questions 17.26 &amp; 17.27 which were to establish a max number of FAD sets per vessel/CPC and to analyse historical FAD set data.</p> <p>Although we understand that problems with data hampered the response to these questions in the past.</p> <p>A reduction target has not been established. We consider that this question cannot be answered by the SCRS and that it is more appropriate to wait for the current situation to be evaluated, so that the Commission can determine the type of measures that could be evaluated by the SCRS. We consider that it is necessary to combine the above questions, based on the comments from Central America, to facilitate the task of the SCRS and avoid the risk of forcing the SCRS to decide which management measures are more appropriate (hence the need to include the impacts of such measures on other species, since the Commission must evaluate all the impacts before making a decision).</p>

9	Assess how different levels of fishing with each gear affect the achievement of the management objectives set for BET and/or YFT.	Received from the EU on 12 July 2023.	
10	Undertake a comparative analysis of different FADs (including both anchored and drifting FADs) management options such as full closures, FAD closures, FAD sets limits etc., from both a scientific and MCS perspective.	Received from the EU on 12 July 2023.	We agree with the EU on the desirability of comparative analysis of different management options. Although the focus of the assessment of the effects is FAD fishing, this analysis should also include other fishing gears and, regarding the monitoring, control and surveillance perspective, we emphasize that it is important that the information is reliable, which is affected by the insufficient information from longline as a consequence of the extremely low on-board observer coverage in this fishery.