

PROGRESS MADE ON THE RECOMMENDATIONS OF WPTT20

PREPARED BY: IOTC SECRETARIAT, 7 OCTOBER 2019

PURPOSE

To provide participants at the 21st WPTT with an update on the progress made in implementing those recommendations from the previous Working Party on Tropical Tunas (WPTT) meeting which were endorsed by the Scientific Committee (SC), and to provide alternative recommendations for the consideration and potential endorsement by participants as appropriate given any progress.

BACKGROUND

At the 20th Session of the WPTT, participants agreed on a series of actions to be taken by participants, CPCs, and the IOTC Secretariat on a range of issues. The subsequent table developed and agreed to by the WPTT was provided to the SC for its endorsement at its December 2018 meeting.

DISCUSSION

The Rules of Procedure of the Scientific Committee include the following seven core tasks, which are to be supported by the various Working Parties.

- a) recommend policies and procedures for the collection, processing, dissemination and analysis of fishery data;
- b) facilitate the exchange and critical review among scientists of information on research and operation of fisheries of relevance to the Commission;
- c) develop and coordinate cooperative research programmes involving Members of the Commission in support of fisheries management;
- d) assess and report to the Commission on the status of stocks of relevance to the Commission and the likely effects of further fishing and of different fishing patterns and intensities;
- e) formulate and report to the sub-commission, as appropriate, on recommendations concerning conservation, fisheries management and research, including consensus, majority and minority views;
- f) consider any matter referred to by the Commission;
- g) carry out other technical activities of relevance to the Commission.

Recalling that the SC, at its 16th Session adopted a set of reporting terminology SC16.07 (para. 23), which was subsequently endorsed by the Commission at its 18th Session in 2014 (S18, para 10), to further improve the clarity of information sharing from, and among the science bodies, the following two term levels should be noted when interpreting the Reports and [Appendix I](#) to this paper:

Level 1: From a subsidiary body of the Commission to the next level in the structure of the Commission:

RECOMMENDED, RECOMMENDATION: Any conclusion or request for an action to be undertaken, from a subsidiary body of the Commission (Committee or Working Party), which is to be formally provided to the next level in the structure of the Commission for its consideration/endorsement (e.g. from a Working Party to the Scientific Committee; from a Committee to the Commission). The intention is that the higher body will consider the recommended action for endorsement under its own mandate, if the subsidiary body does not already have the required mandate. Ideally this should be task specific and contain a timeframe for completion.

Level 2: From a subsidiary body of the Commission to a CPC, the IOTC Secretariat, or other body (not the Commission) to carry out a specified task:

REQUESTED: This term should only be used by a subsidiary body of the Commission if it does not wish to have the request formally adopted/endorsed by the next level in the structure of the Commission. For example, if a Committee wishes to seek additional input from a CPC on a particular topic, but does not wish to formalise the request beyond the mandate of the Committee, it may request that a set action be undertaken. Ideally this should be task specific and contain a timeframe for the completion.

In addition to the Recommendations endorsed by the SC at its 20th Session, the SC also made several requests which, although are not passed to the Commission for its endorsement, are considered actions which the Scientific Committee



has the mandate to issue. The revised recommendations are contained in [Appendix I](#) for the consideration and potential endorsement by the WPTT21.

RECOMMENDATION

That the WPTT:

- 1) **NOTE** paper IOTC–2019–WPTT21–06 which detailed the progress made in implementing the recommendations of the WPTT20, and the requests of the 21st Session of the Scientific Committee (SC21), taking into consideration the recommendations from the SC and decisions of the Commission;
- 2) **AGREE** to consider and revise as necessary, the recommendations, and for these to be combined with any new recommendations arising from the WPTT20, noting that these will be provided to the SC for its endorsement.

APPENDICES

Appendix I: Progress made on the Recommendations and Requests of WPTT20



APPENDIX I

Progress made on the recommendations of WPTT20

WPTT20 Rec. No.		SC21 Rec. No.	Recommendation adopted by the SC20	Endorsed at S23	Commission response / suggestions for consideration at WPTT21
WPTT20.01 (para. 81)	<i>Review new information on fisheries and associated environmental data</i> The WPTT ACKNOWLEDGED the importance of the proposed harmonisation of FOB types and FOB activity definitions and RECOMMENDED that the concept of harmonisation be taken up by the WPDCS and Scientific Committee with the aim of harmonising IOTC definitions with those used by other tRFMOs in the context of the joint tRFMO Working Group on FADs.	(Para. 126)	<i>Review of new information on fisheries and associated environmental data</i> 126. The SC acknowledged the importance of the proposed harmonisation of FOB types and FOB activity definitions and REQUESTED that the concept of harmonisation be taken up by the WPDCS in collaboration with the Scientific Committee with the aim of harmonising IOTC definitions with those used by other tRFMOs in the context of the joint tRFMO Working Group on FADs.	N/A	Update: Briefly discussed during the joint Tuna RFMO FAD WG meeting in La Jolla in 2019. No clear agreed reached.
WPTT20.02 (para. 129)	<i>Review of the statistical data available for skipjack tuna</i> The WPTT NOTED that total catches in 2017 (524,282 t) were more than 10% higher than the catch limit generated by the Harvest Control Rule (470,029 t) which applies to the years 2018–2020, and that there has been an increasing trend in catches over the past 3 years. The WPTT RECOMMENDED that the Scientific Committee advise the Commission of the urgent need to monitor catches of skipjack in the 2018–2020 period to ensure catches do not exceed the limit.	SC21.22 (Para. 127)	<i>Review of the statistical data available for skipjack tuna</i> The SC noted that total catches in 2017 (524,282 t) were 12% higher than the catch limit generated by the Harvest Control Rule (470,029 t) which applies to the years 2018–2020, and that there has been an increasing trend in catches over the past 3 years. The SC RECOMMENDED that the Commission consider the urgent need to monitor catches of skipjack in the 2018–2020 period to ensure catches do not exceed the limit.	N/A	Update: Ongoing
WPTT20.03 (para. 200)	<i>Review of new information on the status of yellowfin tuna</i> The WPTT RECOMMENDED the continuation of CPUE standardization analyses as this is a critical input to the bigeye tuna and yellowfin tuna stock assessments	(para. 113)	<i>Yellowfin tuna stock assessment and development of management advice</i> The SC AGREED to the continuation of CPUE standardization analyses as this is a critical input to the bigeye tuna and yellowfin tuna stock assessments	N/A	Update: The IOTC Secretariat has contracted an external consultant to continue the work.
WPTT20.04 (para. 222)	<i>Yellowfin tuna: Stock Assessments</i> The WPTT RECOMMENDED that the in the future, model diagnostics, including retrospective analyses, jittering and likelihood profiling be conducted to increase confidence that the models are reaching a global minima during fitting and to look for major conflict in data sources.	(Para. 116)	<i>Yellowfin tuna stock assessment and development of management advice</i> The SC REQUESTED that in the future, model diagnostics, including retrospective analyses, jittering and likelihood profiling be conducted to increase confidence that the models are reaching a global minima during fitting and to look for major conflict in data sources	N/A	Update: Ongoing. Modellers will incorporate this advice into their assessments



WPTT20 Rec. No.		SC21 Rec. No.	Recommendation adopted by the SC20	Endorsed at S23	Commission response / suggestions for consideration at WPTT21
WPTT20.05 (para. 225)	<p>Future yellowfin assessments: issues for consideration</p> <p>The WPTT reiterated its previous RECOMMENDATION that development of the next stock assessment of yellowfin tuna should include, or be associated with, a detailed review of the existing data sources, including:</p> <ul style="list-style-type: none"> i. Size frequency data: Evaluation of the reliability of length composition from the longline fisheries (including recent and historical data), review of anomalies in the (EU) PS length composition data, and the need for a thorough review of the size frequency data held by IOTC, in collaboration with the fleets involved, to improve the utilization of these data in tropical tuna stock assessments. ii. Tagging data: Further analysis of the tag release/recovery data set. iii. Alternative CPUE series: a review of the available data from the Indian tuna longline survey data. 	SC21.21 (para. 123)	<p>Future yellowfin tuna assessments: issues for consideration</p> <p>The SC RECOMMENDED that development of the next stock assessment of yellowfin tuna should include, or be associated with, a detailed review of the existing data sources, including:</p> <ul style="list-style-type: none"> i. Size frequency data: Evaluation of the reliability of length composition from the longline fisheries (including recent and historical data), review of anomalies in the (EU) PS length composition data, and the need for a thorough review of the size frequency data held by IOTC, in collaboration with the fleets involved, to improve the utilization of these data in tropical tuna stock assessments. ii. Tagging data: Further analysis of the tag release/recovery data set. iii. Alternative CPUE series: a review of the available data from the Indian tuna longline survey data 	N/A	<p>Update: In progress:</p> <p>Several alternative YFT assessments will be presented to the WPTT21 in 2019. These will incorporate various aspects of these recommendations</p>
WPTT20.06 (para. 228)	<p>Development of management advice for yellowfin tuna</p> <p>The WPTT RECOMMENDED that final management advice be developed from the SS3 models including the reference grid given a relative weight of 75% to Q1 CPUE scenario compared to 25 % weight to Q2 in the grid results. The estimates from the grid are provided in Table 3 While the biomass and reference point trajectories are included in Figure 1. The Kobe strategy matrix derived from the 24 models in the grid is provided in Figure 2. These results indicate that the stock is currently overfished and subject to overfishing</p>	SC21.20 (Para. 103)	<p>Yellowfin tuna stock assessment and development of management advice</p> <p>The SC noted that the 2018 yellowfin tuna assessment indicates that the species is overfished and subject to overfishing and catch reductions required as part of Resolution 18/01 have not been met. The SC further noted that there remain significant uncertainties around the stock assessment inputs and assumptions, such that caveats are required in the interpretation of management advice developed for the species. Acknowledging these concerns, the SC RECOMMENDED that funding be allocated for a workplan (Appendix 38) to systematically address these issues, beginning in January 2019.</p>	N/A	<p>Update: The Commission adopted Resolution 19/01 <i>On an interim plan for rebuilding the Indian Ocean yellowfin tuna stock in the IOTC Area of competence.</i></p>
WPTT20.07	Revision of the WPTT Program of Work (2019–2023)	(paras. 219-220)	Program of Work (2019–2023) and assessment schedule	N/A	Update: Completed.



WPTT20 Rec. No.		SC21 Rec. No.	Recommendation adopted by the SC20	Endorsed at S23	Commission response / suggestions for consideration at WPTT21
(para 253)	The WPTT RECOMMENDED that the SC consider and endorse the WPTT Program of Work (2019–2023), as provided at <u>Appendix IX</u> .		<p>The SC noted IOTC–2018–SC21–09 which provided the Scientific Committee (SC) with a proposed Program of Work for each of its Working Parties (WP), including prioritisation of the elements requested by each WP.</p> <p>The SC noted the proposed Program of Work and priorities for the Scientific Committee and each of the Working Parties and AGREED to a consolidated Program of Work as outlined in Appendix 35a-g. The Chairpersons and Vice-Chairpersons of each working party shall ensure that the efforts of their working party are focused on the core areas contained within the appendix, taking into account any new research priorities identified by the Commission at its next Session..</p>		
WPTT20.08 (para. 263)	<p>Review of the draft, and adoption of the Report of the 20th Session of the WPTT</p> <p>The WPTT RECOMMENDED that the Scientific Committee consider the consolidated set of recommendations arising from WPTT20, provided at <u>Appendix X</u>, as well as the management advice provided in the draft resource stock status summary for each of the three tropical tuna species under the IOTC mandate, and the combined Kobe plot for the three species assigned a stock status in 2018 (Fig. 7):</p> <ul style="list-style-type: none"> ○ Bigeye tuna (<i>Thunnus obesus</i>) – <u>Appendix VI</u> ○ Skipjack tuna (<i>Katsuwonus pelamis</i>) – <u>Appendix VII</u> ○ Yellowfin tuna (<i>Thunnus albacares</i>) – <u>Appendix VIII</u> 	SC21.01 (para. 197)	<p>Tuna – Highly migratory species</p> <p>The SC RECOMMENDED that the Commission note the management advice developed for each tropical and temperate tuna species as provided in the Executive Summary for each species, and the combined Kobe plot for the four species assigned a stock status in 2018 (Fig. 2):</p> <ul style="list-style-type: none"> ○ Albacore (<i>Thunnus alalunga</i>) – Appendix 8 ○ Bigeye tuna (<i>Thunnus obesus</i>) – Appendix 9 ○ Skipjack tuna (<i>Katsuwonus pelamis</i>) – Appendix 10 ○ Yellowfin tuna (<i>Thunnus albacares</i>) – Appendix 11 	(Para. 36)	Update: Completed

WPTT19 Report	WPTT19 REQUESTS	Update/Progress
Para. 45	<p>Status of yellowfin and skipjack tuna fisheries in Pakistan</p> <p>The WPTT NOTED the sharp increase of yellowfin tuna catches from the Pakistan tuna gillnet fishery by Pakistan's reconstructed catch series in recent years (i.e., 76% from 14,000 t</p>	Update: In progress. Pakistan and WWF to provide updates.

	in 2014 to 25,000 t in 2017), and which are currently exempt from Resolution 18/01 due to uncertainties on the location of fishing grounds. The WPTT REQUESTED WWF-Pakistan and the Government of Pakistan provide further clarity on gillnet fishing effort and catches taken in areas beyond national jurisdiction for the next WPTT meeting.	
Para. 46	The WPTT further REQUESTED that the IOTC Secretariat continues to support the work of WWF-Pakistan and the Government of Pakistan in the evaluation and reporting of the crew-based observer program, and facilitate the reporting of length and catch-and-effort data collected by the observer log-books.	Update: Ongoing. The IOTC Secretariat is following the instructions of the Commission and advice from the SC to determine whether crew-based observer programs are an acceptable form of data collection and reporting.
Para. 127	Development of management advice for bigeye tuna The WPTT ADOPTED the management advice developed for bigeye tuna (<i>Thunnus obesus</i>), as provided in the draft resource stock status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary for bigeye tuna with the latest 2017 catch data (if necessary), and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration: o Bigeye tuna (<i>Thunnus obesus</i>) – Appendix VI	Update: Completed.
Para. 130	Review of the statistical data available for skipjack tuna The WPTT NOTED that the catch limits adopted for the yellowfin tuna stock have led to changes in targeting by purse seiners, which since 2017 have avoided setting on free schools of large yellowfin tuna. The increase of targeting of tuna schools associated with FADs has led to changes in the species and size composition of the catch, with more catches of juvenile YFT and BET and increased catches of SKJ, which is the main species on FADs. The WPTT EXPRESSED CONCERN that the change in fishing strategy may not be exclusive to purse seine fisheries and could be detrimental to the status of the stocks of tropical tunas and REQUESTED further evaluation of this issue and, where necessary, which alternative options could be implemented to avoid such adverse impacts on the stock.	Update: Ongoing. This work should be conducted within the sessions of the WPTT.
Para. 132	The WPTT NOTED the particularly large average size of skipjack tuna recorded by the gillnet fishery of I.R. Iran in the years between 1992 and 1997, and that the coarseness of the reported size bins (3cm) prevent this information from being effectively used for the assessment of the species. For this reason, the WPTT REQUESTED the IOTC Secretariat to liaise with scientists from I.R. Iran to confirm the peculiarity of these findings and eventually re-submit the data at the expected level of resolution (1cm size bins).	Update: No updates (pending): scientists from the Iranian Fisheries Research Science institute confirmed the availability of fine-grained size frequency data with the characteristics described, but that these need further processing before being provided to the IOTC Secretariat with the requested level of resolution
Para. 148	Development of management advice for skipjack tuna The WPTT ADOPTED the management advice developed for skipjack tuna as provided in the draft resource stock status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary for skipjack tuna with the latest 2017 catch data (if necessary), and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration: o Skipjack tuna (<i>Katsuwonus pelamis</i>) – Appendix VII.	Update: Completed
Para. 195	Collaborative study of yellowfin tuna CPUE from multiple Indian Ocean fleets in 2018 The WPTT NOTED that the length composition of the catches of the longline fleets is	Update: Ongoing. The external consultant conducting the work will provide an update to the WPTT21.



	estimated considering the longline catches from Korea, Japan, Seychelles and Taiwan, China in the 4 regions. The length composition between these fleets are different, some of them (e.g. Taiwan, China) showing changes over time. Thus, the WPTT REQUESTED that this issues are investigated in the future analysis of the joint-LL CPUE index.	
Para. 223	<p>Preliminary Indian Ocean yellowfin tuna stock assessment 1950–2017 (Stock Synthesis)</p> <p>The WPTT REQUESTED a sensitivity run exploring the effect of the growth function, by incorporating the Dortel et al. (2014) growth model. The WPTT NOTED that the outputs using the Dortel et al. growth differ from the reference grid growth which suggest that this assumption has an important influence on the model results. However, the group also NOTED that the use of a new growth curve would need further adjustments in other model parameters such as the natural mortality. The WPTT AGREED that this requires further exploration, and this will be incorporated into the future plan of work.</p>	Update: Ongoing. Several alternative stock assessment for YFT will be presented to WPTT21. These should include this request
Para. 226	<p>Future yellowfin assessments: issues for consideration</p> <p>The WPTT REQUESTED that estimates of natural mortality are updated using the tagging data, outside the assessment model, given that new information (e.g. tag recaptures and revised catch estimates) are now available</p>	Update: Ongoing. Several alternative stock assessment for YFT will be presented to WPTT21. These should include this request.
Para. 230	<p>Projections and K2SM</p> <p>The WPTT ADOPTED the draft resource stock status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary for the yellowfin tuna with the latest 2017 catch data (if necessary), and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration: Yellowfin tuna (<i>Thunnus albacares</i>) – Appendix VIII..</p>	Update: Completed
Para. 244	<p>Update on Management Strategy Evaluation Progress</p> <p>The WPTT also NOTED that the decisions taken for the 2018 YFT assessment regarding short-term and chronic tag loss differed from the YFT Operating Model grid and REQUESTED that the 2018 YFT assessment assumptions be mimicked in the Operating Model grid.</p>	Update: Ongoing. The modeller will provide an update on the YFT OM during the WPTT21.
Para. 250	<p>Revision of the WPTT Program of Work (2019–2023)</p> <p>The WPTT REQUESTED that the Chairperson and Vice-Chairperson of the WPTT, in consultation with the IOTC Secretariat, develop Terms of Reference (TOR) for each of the high priority projects that are yet to be funded, for circulation to potential funding sources.</p>	Update: Completed.
Para. 260	<p>Date and place of the 21st and 22nd Sessions of the WPTT</p> <p>NOTING the discussion on who would host the 21st and 22nd Sessions of the WPTT in 2019 and 2020 respectively, the WPTT REQUESTED that the IOTC Secretariat liaise with CPCs to determine if they would be able to host the 21st and 22nd sessions of the WPTT respectively (Table 12).</p>	Update: Completed. The WPTT21 is being hosted in San Sebastian Spain, while the Maldives had expressed its intention to host the WPTT22. The latter is to be confirmed