

## PROGRESS MADE ON THE RECOMMENDATIONS AND REQUESTS OF WPB17 AND SC22

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### PURPOSE

To provide participants at the 18<sup>th</sup> WPB with an update on the progress made in implementing those recommendations from the previous Working Party on Billfish (WPB) 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 17<sup>th</sup> Session of the WPB, 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 WPB was provided to the SC for its endorsement at its December 2019 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 16<sup>th</sup> Session adopted a set of reporting terminology SC16.07 (para. 23), which was subsequently endorsed by the Commission at its 18<sup>th</sup> 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 22<sup>nd</sup> 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 WPB18.

**RECOMMENDATION**

That the WPB **NOTE** the progress made in implementing the recommendations and requests of the 17<sup>th</sup> Session of the WPB, and consider whether revised recommendations need to be sent to the SC for its consideration.

**APPENDICES**

**Appendix I:** [Progress made on the Recommendations and Requests of WPB17](#)

## APPENDIX I

## Progress made on the recommendations and requests of WPB17 and SC22

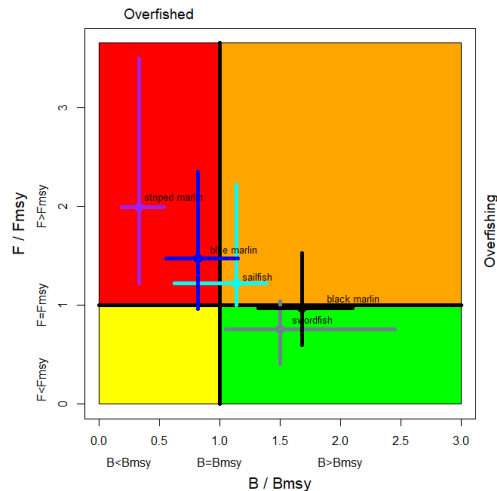
WPB17 Rec. No.	Recommendation from WPB17	SC22 Rec. No.	Recommendation adopted by the SC22	Progress/Comments
WPB17.01	<p><b><i>IOTC Resolutions</i></b></p> <p>(para 6): <b>RECALLING</b> that one of the Indian Ocean billfish species (shortbill spearfish, <i>Tetrapturus angustirostris</i>) is currently not listed among the species managed by IOTC, and considering the ocean-wide distribution of this species, its highly-migratory nature, and that it is a common bycatch in IOTC managed fisheries, the WPB reiterated its previous <b>RECOMMENDATION</b> that the Scientific Committee consider requesting the Commission to include it in the list of species to be managed by the IOTC</p>	SC22.11	<p><b><i>Report of the 17th Session of the Working Party on Billfish (WPB17)</i></b></p> <p>(para. 42) The SC reiterated its previous <b>RECOMMENDATION</b> that on the next revision of the IOTC Agreement, that short bill spearfish (<i>Tetrapturus angustirostris</i>) be included as an IOTC species</p>	<p><b>Update:</b> Ongoing.</p> <p><b><i>Outcomes from the 2<sup>nd</sup> Technical Committee on Performance Review</i></b></p> <p>The SC <b>NOTED</b> the report of the 2<sup>nd</sup> Technical Committee on Performance Review (paper IOTC–2019–TCPR02–R) which was held in Seychelles from 14 to 15 March 2019 and Chaired by Ms Riley Jung-re Kim. This report includes updates from the IOTC scientific bodies.</p> <p>To date no decision has been taken to include short bill spearfish (<i>Tetrapturus angustirostris</i>) as an IOTC species.</p>
WPB 17.02	<p><b><i>Revision of the WPB Program of work (2020–2024)</i></b></p> <p>(para 133): The WPB <b>RECOMMENDED</b> that the SC consider and endorse the WPB Program of Work (2020–2024), as provided in Appendix XI.</p>		<p><b><i>Program of Work (2020–2024) and assessment schedule</i></b></p> <p>(para. 138) The SC <b>NOTED</b> the proposed Program of Work and priorities for the SC and each of the working parties and <b>AGREED</b> to a consolidated Program of Work as outlined in <a href="#">Appendix 35a-g</a>. The Chairpersons and Vice-Chairpersons of each working party will ensure that the efforts of their respective working party is 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>	<p><b>Update:</b> Completed</p>

WPB17.03

**Review of the draft, and adoption of the Report of the 17<sup>th</sup> Session of the Working Party on Billfish**

(para. 141): The WPB **RECOMMENDED** that the Scientific Committee consider the consolidated set of recommendations arising from WPB17, provided at [Appendix XII](#), as well as the management advice provided in the draft resource stock status summary for each of the five billfish species under the IOTC mandate, and the combined Kobe plot for the five species assigned a stock status in 2019 (Fig. 9):

- Swordfish (*Xiphias gladius*) – [Appendix VI](#)
- Black marlin (*Makaira indica*) – [Appendix VII](#)
- Blue marlin (*Makaira nigricans*) – [Appendix VIII](#)
- Striped marlin (*Tetrapturus audax*) – [Appendix IX](#)
- Indo-Pacific sailfish (*Istiophorus platypterus*) – [Appendix X](#)

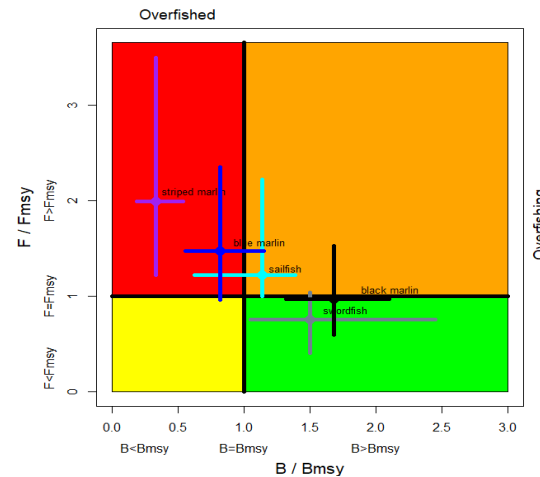


**Fig. 9.** Combined Kobe plot for swordfish (grey), indo-pacific sailfish (cyan), black marlin (black), blue marlin (blue) and striped marlin (purple) showing the 2017, 2018, and 2019 estimates of current stock size (SB or B, species assessment dependent) and current fishing mortality (F) in relation to optimal spawning stock size and optimal fishing mortality. Cross bars illustrate the range of uncertainty from the model runs.

**Billfish**

The SC **RECOMMENDED** that the Commission note the management advice developed for each billfish species under the IOTC mandate, as provided in the Executive Summary for each species, and the combined Kobe plot for the five species assigned a stock status in 2019 (Fig. 3):

- Swordfish (*Xiphias gladius*) – [Appendix 12](#)
- Black marlin (*Makaira indica*) – [Appendix 13](#)
- Blue marlin (*Makaira nigricans*) – [Appendix 14](#)
- Striped marlin (*Tetrapturus audax*) – [Appendix 15](#)
- Indo-Pacific sailfish (*Istiophorus platypterus*) – [Appendix 16](#)



**Fig. 3.** Combined Kobe plot for swordfish (grey), indo-pacific sailfish (cyan), black marlin (black), blue marlin (blue) and striped marlin (purple) showing the 2017, 2018, and 2019 estimates of current stock size (SB or B, species assessment dependent) and current fishing mortality (F) in relation to optimal spawning stock size and optimal fishing mortality. Cross bars illustrate the range of uncertainty from the model runs.

Update: Completed

		SC22.12	<p><b>Revision of catch levels of Marlins under Resolution 18/05</b></p> <p>(para. 47) The SC <b>NOTED</b> that catches in recent years for Black Marlin, Blue Marlin, Striped Marlin and Indo-Pacific Sailfish have all exceeded the catch limits set by Resolution 18/05, and that current catch trends for all four species show no signs of decline in line with meeting the catch limits by 2020. As such, the SC urgently reiterates its <b>RECOMMENDATION</b> that measures are agreed to reduce current catches to the limits set for all four species covered by Resolution 18/05 as per the management advice given in the Executive Summaries</p>	Update: Ongoing.
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WPB17 Report	WPB15 REQUESTS	Update/Progress
Para. 5	The WPB <b>ACKNOWLEDGED</b> and <b>REITERATED</b> the request from the Scientific Committee for full compliance with Resolutions 15/01 and 15/02 and <b>REQUESTED</b> that all involved CPCs take immediate action to overcome any issues preventing the timely and complete reporting of all mandatory statistical data to the IOTC Secretariat	Update: Ongoing.
Para. 19	The WPB <b>NOTED</b> the main billfish data issues, by type of dataset and fishery, that are considered to negatively affect the quality of the statistics available at the IOTC Secretariat, which are provided in <a href="#">Appendix V</a> , and <b>REQUESTED</b> that the CPCs listed in the Appendix make efforts to remedy to the identified data issues and report back to the WPB at its next meeting	Update: CPCs to provide an update during the WPB meeting
Para. 24	The WPB <b>NOTED</b> that the IOTC Secretariat is currently finalizing a review of the revised historical catch series submitted to IOTC by the Government of Pakistan, and which will be presented at the WPDCS meeting later in 2019. The WPB <b>REQUESTED</b> than an update also be provided to the WPB meeting in 2020, including a summary of any major changes to the catches of billfish	Update: The revised catch series have been presented at the WPDCS in December 2019, endorsed by the SC and are now incorporated in the IOTC database. Details about the resulting changes (with respect to previous official estimates) in billfish catch series will be presented in document IOTC-2020-WPB18-07 “ <i>Review of the statistical data and fishery trends for billfish species</i> ”.
Para. 27	The WPB <b>NOTED</b> that catches blue marlin are often processed on-board, which causes issues of identification when catches are landed. Currently catches of blue marlin reported to the IOTC Secretariat are included in the species aggregate of ‘other billfish’, which include a number of other billfish species; the WPB therefore <b>REQUESTED</b> that I.R. Iran advise the IOTC Secretariat on how best to disaggregate	Update: I.R. Iran to provide an update during the WPB meeting.

	catches of 'other billfish' to ensure catches of blue marlin are accurately reported for Iran's gillnet fisheries	
Para. 32	The WPB <b>NOTED</b> the large decrease of CPUE from 6107 kg/month in 2013 to 3337 kg/month in 2017 is largely attributed to the deployment of subsurface gillnet instead of the classical gillnet gear. The WPB <b>REQUESTED</b> Pakistan to explore the species composition of landings during the fishing seasons to highlight whether the reduction in catches is impacting all billfish species or selected species.	<b>Update:</b> Pakistan to provide an update during the WPB meeting.
Para. 43	The WPB <b>REQUESTED</b> that CPCs improve efforts to collect and report data on sports and recreational fisheries to the IOTC Secretariat as a matter of priority, given their importance in terms of their contribution to total billfish catches.	<b>Update:</b> CPCs to provide an update during the WPB meeting
Para. 75	<b>Blue marlin</b> Regarding the availability of indices prior to 1994, the WPB <b>NOTED</b> there were potential issues in the dataset before 1979 (i.e., vessel ID was missing) but data after 1979 are available. The WPB therefore <b>REQUESTED</b> that the standardized indices be extended back to 1979 for use in the current stock assessment.	<b>Update:</b> Completed - The JPN indices were extended back to 1979 for use in the assessment
Para. 85	<b>Blue marlin: Summary of stock assessment models in 2019.</b> The WPB <b>NOTED</b> the consensus to use a base case model which included the JPN indices (NW and CE), Taiwanese indices (NW and NE), and Indonesian indices. The WPB also <b>AGREED</b> to extend the JPN indices (both NW and CE) back to 1979, and <b>REQUESTED</b> a sensitivity run be conducted using a Fox production model for comparison with the SS3 assessment	<b>Update:</b> The JPN indices were extended back to 1979 for use in the assessment. Given the time limitation, it was agreed to examine alternative production function(s) in future iterations of the assessment
Para. 105	<b>Indo-Pacific Sailfish</b> The WPB <b>ACKNOWLEDGED</b> the efforts of WWF-Pakistan and <b>THANKED</b> the Government of Pakistan for this important study, and <b>REQUESTED</b> Pakistan to officially report the size frequency data to the IOTC Secretariat used in the analyses presented in the paper.	<b>Update:</b> Pakistan to provide an update during the WPB meeting.
Para. 132	The WPB <b>NOTED</b> that in response to the request from WPB16 and SC, additional samples of billfish species have been collected in the second phase of the IOTC stock structure project. The WPB <b>REQUESTED</b> an update of the study regarding the billfish species to be provided to the next WPB meeting.	<b>Update:</b> The project coordinator will provide the results of the stock structure study to the WPB meeting