

## PROGRESS MADE ON THE RECOMMENDATIONS OF WPB10

PREPARED BY: IOTC SECRETARIAT, 3 SEPTEMBER 2013  
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### PURPOSE

To provide an update on the progress made in implementing the recommendations from the previous Working Party on Billfish (WPB), which were endorsed by the Scientific Committee (SC), and to provide alternative recommendations for the consideration and potential endorsement by participants.

### BACKGROUND

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) to carry out other technical activities of relevance to the Commission.

### Process:

- 1) **WPB** – At the Tenth Session of the WPB, participants agreed on a series of actions to be taken by participants, CPCs, and the Secretariat on a range of issues;
- 2) **SC** – The recommendations were considered by the SC in December 2012. At the SC15 meeting, the recommendations of the WPB10 were either rejected or revised and then adopted as those of the SC;
- 3) **Commission** – The refined recommendations were then passed to the Commission for its consideration and possible endorsement.

### DISCUSSION

Noting the core tasks of the SC, and hence the WPB, participants are reminded that any recommendations developed during a Session, must be carefully constructed so that each contains the following elements:

- 1) a specific action to be undertaken (deliverable);
- 2) clear responsibility for the action to be undertaken (i.e. a specific CPC of the IOTC, the Secretariat, another subsidiary body of the Commission or the Commission itself);
- 3) a desired time from for delivery of the action (i.e. by the next working party meeting, or other date).

The Secretariat has undertaken a review of the recommendations arising from the previous WPB meeting and compared them against those endorsed by the SC [Appendix A](#). Any subsequent actions taken by the Commission at the most recent meeting have also been added to the Appendix. In cases where a recommendation is yet to be fulfilled, a proposal for consideration at the WPB meeting has been provided.

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**RECOMMENDATION**

That the WPB **NOTE** the progress made in implementing the recommendations of the WPB10 and consider the proposed draft revisions to those recommendations yet to be completed.

That the WPB **AGREE** to the revised recommendations, and for these to be combined with any new recommendations arising from the WPB10, noting that these will be provided to the SC for their endorsement.

**APPENDICES**

**Appendix A:** [Progress made on the recommendations of WPB10 and SC15.](#)

## APPENDIX A

### Progress made on the recommendations of WPB10 and SC15

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
WPB10.01 (para. 17)	SC15.41 (para.179)	<b>Billfish identification cards</b> <b>NOTING</b> that the IOTC Secretariat has developed identification cards for billfish species at the request of the WPB and SC, but no funds have yet been allocated to print the cards, the SC <b>RECOMMENDED</b> that the Commission allocate funds in the 2013 budget to print sets of identification cards for the billfish species, noting that the total estimated printing costs for the first 1000 sets of the identification cards is around a maximum of US\$6,700 (Table 7). The IOTC Secretariat shall seek funds from potential donors to print additional sets of the identification cards at US\$5,500 per 1000 sets of cards.	Yes	Completed. Cards printed and being distributed.  The WPB may wish to consider recommending further translation.  Consider requesting that the Secretariat include in the 2014 Budget (Printing or Capacity Building lines), and not 'to be determined'.  In addition, funds remaining in the Capacity Building Budget line for 2013 could be used.
WPB10.02 (para. 18)	SC15.41 (para.179)	See above.	Yes	See above.
WPB10.03 (para. 20)	SC15.66 (para.64)	<b>Length-age keys</b> The SC <b>RECOMMENDED</b> that as a matter of priority, CPCs that have important fisheries catching billfish (EU, Indonesia, Japan,Sri Lanka and Taiwan,China,) to collect and provide basic or analysed data that would be used to establish length-age keys and non-standard measurements to standard measurements keys for billfish species, by sex and area.	Yes	Nil progress.
WPB10.04 (para. 21)	Request	<b>Catch, Catch-and-effort, Size data</b> (SC15. Para 65) The SC <b>REQUESTED</b> that the EU,Spain improve the status of catch-and-effort data for marlins and sailfish and its provision to the IOTC Secretariat.	-	To be determined at the WPB11

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
WPB10.05 (para. 22):	Request	(SC15. Para 66) The SC <b>REQUESTED</b> that the EU, Spain longline fleet provide the IOTC Secretariat with catch-and-effort and size data of marlins and sailfish by time and area strata, noting that this is already a mandatory reporting requirement.	–	To be determined at the WPB11
WPB10.06 (para. 23):	Request	(SC15. Para 67) The SC <b>REQUESTED</b> that Japan resume size sampling on its commercial longline fleet, and that Taiwan, China provide size data for its fresh longline fleet to attain the minimum recommended by the Commission (1 fish by metric ton of catch by type of gear and species).	–	To be determined at the WPB11
WPB10.07 (para. 24):	Request	(SC15. Para 68) The SC <b>REQUESTED</b> that Indonesia and India provide catch-and-effort and size frequency data for their longline fleets.	–	To be determined at the WPB11
WPB10.08 (para. 25):	Request	(SC15. Para 69) The SC <b>REQUESTED</b> that CPCs having artisanal and semi-industrial fleets, in particular Iran, Pakistan and Sri Lanka, provide catch and effort as well as size data as per IOTC requirements for billfish caught by their fleets.	–	To be determined at the WPB11
WPB10.09 (para. 26):	Request	(SC15. Para 70) <b>NOTING</b> that not all CPCs are collecting size data using standard measurements, the SC <b>AGREED</b> that only lower-jaw to fork length, eye to fork length or pectoral to second dorsal length are taken by fishers, samplers and observers for billfish species.	–	To be determined at the WPB11
WPB10.10 (para. 27)	Request	(SC15. Para 71) The SC <b>REQUESTED</b> that the EU record and report information on catches of billfish, by species, for its purse seine fisheries.	–	This is a requirement of IOTC Resolution 13/03 and Resolution 10/02.
WPB10.11 (para. 28)	Request	<b>Data inconsistencies</b> Noting the progress made to date, the SC <b>REQUESTED</b> that the IOTC Secretariat finalise the study aimed at assessing the consistency of average weights derived from the available catch and effort data, as derived from logbooks, and size data	–	To be determined at the WPB11

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
		provided by EU, Spain, Japan, Seychelles and Taiwan, China and to report final results at the next WPB meeting.		
WPB10.12 (para. 29)	SC15.67 (para.73)	The SC <b>RECOMMENDED</b> that as a matter of priority, India, Iran and Pakistan provide catch-and-effort data and size data for billfish, in particular for gillnet fisheries, as soon as possible, noting that this is already a mandatory reporting requirement.	Yes	To be determined at the WPB11
WPB10.13 (para. 34)	Request	<b>Sports fisheries</b> <b>NOTING</b> the increasing importance of sports fisheries in the total catch of marlin and sailfish species, the WPB <b>REQUESTED</b> that the IOTC Secretariat develop a list of contacts of Institutes, Foundations and NGOs implementing tagging programs of large pelagic fishes in the Indian Ocean and to summarise this information for presentation at the next WPB meeting.	-	This has been incorporated into the Terms of Reference for the provision of scientific services to the IOTC: Facilitating the acquisition of catch-and-effort and size data from sport fisheries operating in the western Indian Ocean.  <i>1. Complete a directory of sport fishing centres in the western Indian Ocean region (developing CPCs west of India: east Africa, Middle-East), including contact persons, e-mails and telephone numbers.</i>
WPB10.14 (para. 36)	SC15.65 (para.62)	<b>Review of data available at the secretariat for marlins</b> The SC <b>NOTED</b> the main billfish data issues that are considered to negatively affect the quality of the statistics available at the IOTC Secretariat, by type of dataset and fishery, which are provided in Appendix VI of the WPB10 report (IOTC-2012-WPB10-R), and <b>RECOMMENDED</b> that the CPCs listed in the appendix, make efforts to remedy the data issues identified and to report back to the WPB at its next meeting.	Yes	The WPB <b>NOTED</b> the main billfish data issues that are considered to negatively affect the quality of the statistics available at the IOTC Secretariat, by type of dataset and fishery, which are provided in <u>Appendix XX</u> , and <b>RECOMMENDED</b> that the CPCs listed in the Appendix, make efforts to remedy the data issues identified and to report back to the WPB at its next meeting.
WPB10.15 (para. 37)	Request	(SC15 para. 63) The SC <b>NOTED</b> that the quality of the data available at the IOTC Secretariat on marlins is likely to be compromised by species misidentification and <b>REQUESTED</b> that CPCs review their historical data in order to identify and correct potential identification problems that are detrimental to	-	To be determined at the WPB11

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
		any analysis of the status of the stocks.		
WPB10.16 (para. 39)	Agreement	<p><b>Sri Lankan billfish landings</b></p> <p>(SC15 para. 75) The SC <b>NOTED</b> that to date, Sri Lanka has been unable to provide accurate statistics for billfish species to the IOTC Secretariat, due to poor species identification and low levels of sampling coverage for its coastal and offshore fisheries. The SC <b>ACKNOWLEDGED</b> that in Sri Lanka billfish are often landed cut into pieces and separated upon arrival at Sri Lankan landing stations which creates difficulties in obtaining accurate length measurements.</p> <p>(SC15 para. 76) The SC <b>AGREED</b> that as a matter of priority, Sri Lanka increase sampling coverage to attain at least the coverage levels recommended by the Commission (1 fish by metric ton of catch by type of gear and species), including:</p> <ul style="list-style-type: none"> <li>• catches sampled or observed for at least 5% of the vessel activities for coastal fisheries, including collection of catch, effort and size data for IOTC species and main bycatch species;</li> <li>• implementation of logbook systems for offshore fisheries that incorporate species level information requirements for billfish, as per IOTC Resolution 12/03.</li> </ul> <p>The information collected through the above activities should allow Sri Lanka to estimate species level catches by gear for billfish and other important IOTC or bycatch species.</p>	-	To be determined at the WPB11
WPB10.17 (para. 42)	SC15.68 (para.78)	<p><b>Madagascar's billfish landings</b></p> <p><b>NOTING</b> that the longline fishery in Madagascar is a new and developing fishery, the SC <b>RECOMMENDED</b> that Madagascar ensure that it develops and</p>	Yes	To be determined at the WPB11

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
		implements a data collection system, including sampling, logbooks and observers, which would adequately cover the entire fishery		
WPB10.18 (para. 44)	SC15.69 (para.80)	<b>Maldives billfish landings</b> The SC <b>NOTED</b> that the level of capture of marlins from the Maldivian artisanal fishery appears to be very high compared to the total catches reported for the Indian Ocean and <b>RECOMMENDED</b> that the Maldives provide a review of its landings of each marlin species at the next WPB meeting	Yes	To be determined at the WPB11
WPB10.19 (para. 45)	SC15.70 (para.81)	The SC <b>RECOMMENDED</b> that the Maldives implement data collection systems, through logbooks and sampling for its fisheries that incorporate species level information requirements for billfish, as per IOTC Resolution 12/03. The information collected should allow the Maldives to estimate species level catches by gear for billfish and other important IOTC or bycatch species.	Yes	To be determined at the WPB11
WPB10.20 (para. 53)	SC15.71 (para.82)	<b>Mozambique billfish landings</b> <b>NOTING</b> that at present no scientific observers are being placed on board foreign flagged vessels licensed to fish in the Mozambique EEZ, the SC <b>RECOMMENDED</b> that Mozambique make it a licensing requirement for any foreign vessels fishing in the Mozambique EEZ to take on board scientific observers and to report the data collected as per IOTC requirements. Foreign vessels fishing in the Mozambique EEZ should ensure that scientific observers are brought onboard as per IOTC requirements.	Yes	To be determined at the WPB11
WPB10.21 (para. 85)	SC15.72 (para.83)	<b>Review of fleet dynamics</b> The SC <b>RECOMMENDED</b> that both Japan and	Yes	To be determined at the WPB11

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
		Taiwan,China undertake a complete historical review of their longline data and to document the changes in fleet dynamics for presentation at the next WPB meeting. The historical review should include as much explanatory information as possible regarding changes in fishing areas, species targeting, gear changes and other fleet characteristics to assist the WPB understand the current fluctuations observed in the data.		
WPB10.22 (para. 105)	Agreement	<p><b>Parameters for future analyses: stock assessments</b></p> <p><b>NOTING</b> that the current time frames for data exchange do not allow enough time to conduct thorough stock assessment analyses, and this could have a detrimental effect on the quality of advice provided by the WPB, the SC <b>AGREED</b> that exchanges of data (CPUE indices and coefficient of variation) should be made as early as possible, but no later than 30 days prior to a working party meeting, so that stock assessment analysis can be provided to the IOTC Secretariat no later than 15 days before a working party meeting, as per the recommendations of the SC, which states: <i>“The SC also ENCOURAGED data to be used in stock assessments, including CPUE standardisations, be made available not less than three months before each meeting by CPCs and where possible, data summaries no later than two months prior to each meeting, from the IOTC Secretariat; and RECOMMENDED that data to be used in stock assessments, including CPUE standardisations be made available not less than 30 days before each meeting by CPCs.”</i> (IOTC-2011-SC14-R; p68)</p>	-	To be determined at the WPB11
WPB10.23 (para. 110)	SC15.02 (para. 210)	<p><b>Development of management advice for marlins</b></p> <p>The SC <b>RECOMMENDED</b> that the Commission note the management advice developed for each billfish species as provided in the Executive Summary for each species:</p>	Yes	The WPB <b>ADOPTED</b> the management advice developed for <b>billfish</b> as provided in the draft resource stock status summaries for billfish <a href="#">Appendix ...</a> , and <b>REQUESTED</b> that the IOTC Secretariat update the draft resource stock status





WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
		<ul style="list-style-type: none"> <li>• Swordfish (<i>Xiphias gladius</i>) – <a href="#">Appendix XIII</a></li> <li>• Black marlin (<i>Makaira indica</i>) – <a href="#">Appendix XIV</a></li> <li>• Blue marlin (<i>Makaira nigricans</i>) – <a href="#">Appendix XV</a></li> <li>• Striped marlin (<i>Tetrapturus audax</i>) – <a href="#">Appendix XVI</a></li> <li>• Indo-Pacific sailfish (<i>Istiophorus platypterus</i>) – <a href="#">Appendix XVII</a></li> </ul>		<p>summaries with the latest 2012 catch data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration in December 2013.</p>
WPB10.24 (para. 119)	SC15.02 (para. 210)	<p><b>Development of management advice for Indo-Pacific sailfish</b> See above - Combined</p>	Yes	See above.
WPB10.25 (para. 127)	Noted	<p><b>Indian Ocean Swordfish Stock Structure project (IOSSS)</b> (SC15 para. 85) The SC <b>NOTED</b> that although the results of the IOSSS project did not reveal any structure within the Indian Ocean with the markers used, however the hypothesis of a population structuring at the regional level cannot be discarded and needs to be investigated using different markers or approaches.</p>	Yes	<p>(S17 para. 28) The Commission <b>NOTED</b> that most of the evidence provided to date has indicated that the resource in the southwest Indian Ocean has been overfished in the past decade and that biomass remains below the level that would produce the maximum sustainable yield (<math>B_{MSY}</math>), however recent declines in catch and effort have brought fishing mortality rates to levels below the level that would produce the maximum sustainable yield (<math>F_{MSY}</math>). A risk of reversing the rebuilding trend remains if there is any increase in catch in this region. Thus, catches of swordfish in the southwest Indian Ocean should be maintained at levels at or below those observed in 2009 (6,600 t), until there is clear evidence of recovery and biomass exceeds <math>B_{MSY}</math>.</p> <p>(S17 para. 29) The Commission <b>REQUESTED</b> that the southwest region continue to be analysed as a special resource, as it appears to be highly depleted compared to the Indian Ocean as a whole.</p> <p>(S17 para. 30) The Commission <b>ACKNOWLEDGED</b> that</p>

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
				there is no current need to apply additional management measures to the southwest Indian Ocean, although the resource in this area should be carefully monitored.
WPB10.26 (para. 130)	SC15.73 (para.86)	<b>Swordfish: European Union longline fisheries CPUE indices</b>  The SC <b>RECOMMENDED</b> that scientists from the EU undertake a revised CPUE analysis for their longline fleets, and consider combining the analysis prior to the next WPB meeting where swordfish will be dealt with as a priority.	Yes	To be determined at the WPB11
WPB10.27 (para. 139)	SC15.02 (para. 210)	<b>Development of management advice for swordfish</b> The WPB <b>RECOMMENDED</b> that the SC note the management advice developed for swordfish ( <i>Xiphias gladius</i> ), as provided in the draft resource stock status summary ( <a href="#">Appendix XI</a> ).	Yes	See above.
WPB10.28 (para. 143)	SC15.50 (para.204)	<b>Effect of piracy on billfish fisheries</b>  The SC <b>RECOMMENDED</b> that given the lack of quantitative analysis of the effects of piracy on fleet operations and subsequent catch and effort trends, and the potential impacts of piracy on fisheries in other areas of the Indian Ocean through the relocation of longliners to other fishing grounds, specific analysis should be carried out and presented at the next WPTT meeting by the CPCs most affected by these activities, including Japan, Republic of Korea and Taiwan,China. The Chair of the WPTT shall facilitate the analysis and report back to the SC in 2013.	Yes	To be determined at the WPB11
WPB10.29 (para. 145)	Agreement	<b>Revision of the WPB workplan</b>  (SC15 para 237) The SC <b>NOTED</b> the proposed workplans and priorities of each of the Working Parties and <b>AGREED</b> to the revised workplans as outlined in <a href="#">Appendix XXXV</a> . The Chairs	Yes	To be determined at the WPB11

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
		and Vice-Chairs of each working part shall ensure that the efforts of their 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.		
WPB10.30 (para. 146)	Agreement	(SC15 para. 238) The SC <b>ADOPTED</b> a revised assessment schedule for the tuna and tuna-like species under the IOTC mandate, as well as the current list of key shark species of interest, as outlined in <a href="#">Appendix XXXVI</a> . Following the uncertainty remaining in the bigeye tuna assessment carried out for the previous WPTT meetings in 2010 and 2011, the WPTT <b>AGREED</b> that bigeye tuna would be the priority species for stock assessments in 2013. Only stock status indicators (i.e standardised CPUE series) should be updated for skipjack tuna and yellowfin tuna.	Yes	To be determined at the WPB11
WPB10.31 (para. 149)	SC15.95 (para.190)	<b>Risk-based approaches to determining stock status</b> The SC <b>RECOMMENDED</b> that the IOTC Secretariat facilitate a process to provide the necessary information to the SC so that it may consider the Weight-of-Evidence approach to determine species stock status, as an addition to the current approach of relying solely on fully quantitative stock assessment techniques.	Yes	To be provided at the 16 <sup>th</sup> Session of the SC.
WPB10.32 (para. 156)	SC15.13 (para.87)	<b>Review of the draft, and adoption of the Report of the Tenth Session of the Working Party on Billfish</b> <b>NOTING</b> that despite the mandatory reporting requirements detailed in Resolutions 10/02 and 12/03 data on billfish fisheries, in particular for the marlins, remain largely unreported by CPCs, the SC <b>RECOMMENDED</b> that the Compliance Committee and the Commission note these non-compliance matters, develop mechanisms to ensure that CPCs	Yes	Nil progress.

WPB10 Rec. No.	SC15 Rec. No.	Recommendation adopted by the SC15	Endorsed at S17	Comments and proposal for consideration at WPB11
		fulfil their reporting obligations.		
WPB10.33 (para. 157)	Noted	(SC15 para. 56) The SC <b>NOTED</b> the report of the Tenth Session of the Working Party on Billfish (IOTC–2012–WPB10–R), including the consolidated list of recommendations provided as an appendix to the report.	–	<p>The WPB <b>RECOMMENDED</b> that the SC consider the consolidated set of recommendations arising from WPB11, provided at <a href="#">Appendix ...</a>, as well as the management advice provided in the draft resource stock status summary for each of the species or species groups species under the mandate of the WPB:</p> <ul style="list-style-type: none"> <li>• Swordfish (<i>Xiphias gladius</i>) – Appendix <b>X</b></li> <li>• Black marlin (<i>Makaira indica</i>) – Appendix <b>X</b></li> <li>• Blue marlin (<i>Makaira nigricans</i>) – Appendix <b>X</b></li> <li>• Striped marlin (<i>Tetrapturus audax</i>) – Appendix <b>X</b></li> <li>• Indo-Pacific sailfish (<i>Istiophorus platypterus</i>) – Appendix <b>X</b></li> </ul>