

PROGRESS MADE ON THE RECOMMENDATIONS OF WPB12

PREPARED BY: IOTC SECRETARIAT AND CHAIR
LAST UPDATED: 28 JANUARY 2015

PURPOSE

To provide participants at the 13th 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 11th 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 2014 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 17th 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 WPB13.

RECOMMENDATION

That the WPB **NOTE** the progress made in implementing the recommendations and requests of the 12th 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 WPB12](#)

APPENDIX I

Progress made on the recommendations and requests of WPB12 and SC17

WPB12 Rec. No.	Recommendation from WPB12	SC17 Rec. No.	Recommendation adopted by the SC17	Progress/Comments
WPB12. 01	<p>Meeting participation fund</p> <p>(para. 13): NOTING that the MPF was used to fund the participation of only 4 national scientists to the WPB12 meeting in 2014 (from 8 applications) compared to 10 recipients in 2013 (from 10 applications), all of which were required to submit and present a working paper at the WPB meeting, the WPB RECOMMENDED that the Scientific Committee consider the following:</p> <ul style="list-style-type: none"> • The IOTC Meeting Participation Fund (MPF), adopted by the Commission in 2010 (Resolution 10/05 <i>On the establishment of a Meeting Participation Fund for developing IOTC Members and non-Contracting Cooperating Parties</i>), and now incorporated into the IOTC Rules of Procedure (2014), was established for the purposes of supporting scientists and representatives from IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs) who are developing States to attend and contribute to the work of the Commission, the Scientific Committee and its Working Parties. • The Commission has made the following directives to the IOTC Secretariat: <ul style="list-style-type: none"> a) The Commission had directed the IOTC Secretariat (via Resolution 10/05 and now via the IOTC Rules of Procedure (2014)) to ensure that: (para. 88 of the S18 Report) <ul style="list-style-type: none"> i. the MPF be utilised, as a first priority, to support the participation of scientists from developing CPCs in scientific meetings of the IOTC, including Working Parties, rather than non-science meetings. ii. the MPF will be allocated in such a way that no 	SC17. Para. 112. SC17.33	<p>Meeting participation fund</p> <p>NOTING the various comments made by many of the developing CPCs in attendance at the meeting, that the IOTC MPF was crucial for the success of the WPNT, and that the benefits are clearly being seen in terms of increased active engagement at each meeting by recipients, as well as the rapidly increasing quality of the scientific papers being submitted, the SC REQUESTED that the funding of national scientists from developing Contracting Parties to attend the WPNT be considered a high priority.</p> <p>NOTING that the MPF was used to fund the participation of a reduced number of national scientists to the Working Parties in 2014, 49 national scientists to the Working Party meetings and the SC in 2014 (58 in 2013; 42 in 2012), all of which were required to submit and present a working paper at the meeting, the SC RECOMMENDED that the Commission consider the following:</p> <ul style="list-style-type: none"> • The IOTC Meeting Participation Fund (MPF), adopted by the Commission in 2010 (Resolution 10/05 <i>On the establishment of a Meeting Participation Fund for developing IOTC Members and non-Contracting Cooperating Parties</i>), and now incorporated into the IOTC Rules of Procedure (2014), was established for the +purposes of supporting scientists and representatives from IOTC Contracting Parties who are developing States to attend and contribute to the work of the Commission, the Scientific Committee and its Working Parties. • The Commission has made the following directives to the IOTC Secretariat: 	Update: [Ongoing] – The MPF will be announced in the upcoming WPB13 meeting announcement circular.



	<p>more than 25% of the expenditures of the Fund in one year is used to fund attendance to non-scientific meetings.</p> <p>iii. thus, 75% of the annual MPF shall be allocated to facilitating the attendance of developing CPC scientists to the Scientific Committee and its Working Parties.</p> <p>b) The Commission had directed the IOTC Secretariat that any cost savings made on the annual IOTC budget, shall also be used to further supplement the \$60,000 currently budgeted for the MPF.</p> <ul style="list-style-type: none"> In accordance with para. 89 of the S18 Report, the IOTC Secretariat is actively seeking extra budgetary funding sources to supplement the MPF budget from individual Contracting Parties as well as other interested groups. However, the WPB was informed by the IOTC Secretariat that other sources should actively be sought by interested candidates, including the UNFSA meeting fund, as well as through their own domestic budgetary processes. The detailed explanation of the MPF usage and expenditure in 2014, as described in para. 14 below. 	<p>Para. 119</p> <p>Para. 122</p>	<p>a) The Commission had directed the IOTC Secretariat (via Resolution 10/05 and now via the IOTC Rules of Procedure (2014)) to ensure that: (para. 88 of the S18 Report)</p> <ol style="list-style-type: none"> the MPF be utilised, as a first priority, to support the participation of scientists from developing Contracting Parties in scientific meetings of the IOTC, including Working Parties, rather than non-science meetings. the MPF will be allocated in such a way that no more than 25% of the expenditures of the Fund in one year is used to fund attendance to non-scientific meetings. thus, 75% of the annual MPF shall be allocated to facilitating the attendance of developing Contracting Party scientists to the Scientific Committee and its Working Parties. <p>b) The Commission had directed the IOTC Secretariat that any cost savings made on the annual IOTC budget, shall also be used to further supplement the \$60,000 currently budgeted for the MPF.</p> <ul style="list-style-type: none"> In accordance with para. 89 of the S18 Report, the IOTC Secretariat is actively seeking extra budgetary funding sources to supplement the MPF budget from individual Contracting Parties as well as other interested groups. However, the SC was informed by the IOTC Secretariat that other sources should actively be sought by interested candidates, including the UNFSA meeting fund, as well as through their own domestic budgetary processes. <p>The SC strongly RECOMMENDED that this fund be maintained into the future and increased back to its original allocation of \$200,000 per year.</p> <p>The SC REQUESTED CPCs send a relevant scientist to consecutive Working Party meetings where possible,</p>	
--	---	-----------------------------------	---	--



<p>WPB12.02</p>	<p>(para. 15): The WPB RECOMMENDED that the Scientific Committee consider revising the MPF rules of procedure, so that a <u>Draft</u> paper be submitted to the relevant Working Party MPF Selection Panel earlier than the current 15 days before the meeting, so that the Panel may review the full paper rather than just the abstract, and provide guidance on areas for improvement and the suitability of the application to receive funding using the MPF. The justification of this request is based upon the reduced funds available and the need to maximise benefits. However, some participants did not want the deadline to be brought earlier than the current 15 day deadline.</p>	<p>Para 123</p>	<p>rather than having a different participant each year, to strengthen capacity and provide continuity.</p> <p>The SC RECOMMENDED that the MPF rules of procedure be modified, so that a <u>Draft</u> working document, rather than an abstract, be submitted to the relevant Working Party MPF Selection Panel 45 days before the meeting, so that the Panel may review the full paper rather than just the abstract, and provide guidance on areas for improvement and the suitability of the application to receive funding using the MPF. The justification of this request is based upon the reduced funds available and the need to maximise benefits. The SC AGREED that until such time as the Commission revises the IOTC Rules of Procedure the MPF selection panels may choose to follow this proposal.</p>	
<p>WPB12.03</p>	<p>Resolution 11/04 on a Regional Observer Scheme</p> <p>(para. 20): NOTING that electronic monitoring (video) has now been trialled and successfully implemented in many fisheries worldwide (e.g. Australia, European Union, USA, New Zealand), with the aim of supplementing scientific observers on board vessels; and given the current difficulties cited as reasons for not deploying scientific observers under the IOTC Regional Observer Scheme (ROS) on board large-scale gillnet vessels operating in the Indian Ocean; the WPB RECOMMENDED that the IOTC Secretariat, facilitate the development of a project concept note/proposal to trial video monitoring to evaluate the efficacy of video cameras in the collection of information on catch, discards and fishing effort as a means to supplement scientific observer coverage for large-scale gillnet vessels. The trial will include an evaluation of the main challenges of using video data such as the accurate identification of IOTC and bycatch species, weight and size of catches and the time taken to process the footage and extract the required data. The concept note/proposal shall also include a clear indication that the IOTC data confidentiality policy (Resolution 12/02) will need to be modified to ensure any data/information collected is for the sole purpose of scientific analysis and not for compliance</p>	<p>SC17.43</p>	<p>Electronic Monitoring</p> <p>(para. 166) NOTING that electronic monitoring (including video) has been trialled and successfully implemented in many fisheries worldwide (e.g. Australia, European Union, USA, New Zealand), with the aim of supplementing scientific observers on board vessels; and given the current difficulties cited as reasons for not deploying scientific observers under the IOTC Regional Observer Scheme (ROS) on board large-scale gillnet vessels operating in the Indian Ocean; the SC RECOMMENDED that the Commission considers assigning the IOTC Secretariat, in consultation with interested IOTC scientists, to develop a project on electronic monitoring in the IOTC area of competence. This would allow an evaluation of the efficacy of electronic monitoring in the collection of information on catch, discards and fishing effort as a means to supplement scientific observer coverage for large-scale gillnet vessels. The trial will include an evaluation of the main challenges of using electronic monitoring data such as the accurate identification of IOTC and bycatch species, weight and size of catches and the time taken to process the footage and extract the required data. The concept note/proposal shall also include a clear indication that the IOTC data</p>	

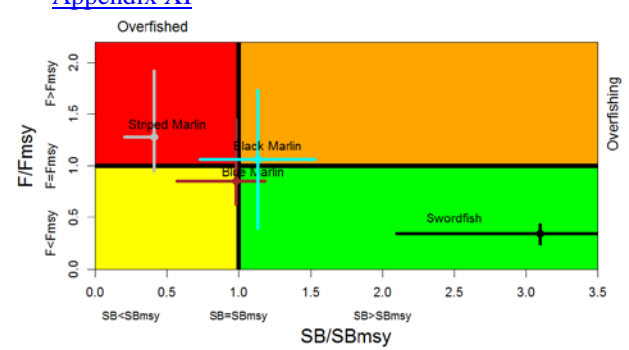
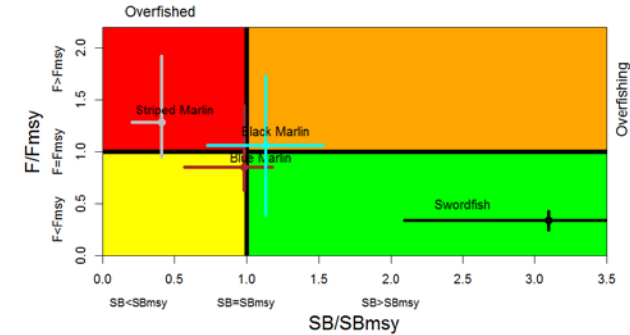


	purposes. The concept note should include a detailed budget and be communicated to a range of potential funding organisations.		confidentiality policy (Resolution 12/02) will need to be modified to ensure any data/information collected is for the sole purpose of scientific analysis and not for compliance purposes. The concept note should include a detailed budget and be communicated to a range of potential funding organisations.	
WPB12.04	<p>Billfish species identification</p> <p>(para. 28): NOTING the recent online survey distributed by the IOTC Secretariat, the WPB strongly RECOMMENDED that the IOTC Secretariat ensure that hard copies of the identification cards continue to be printed in hard copy form as many CPCs scientific observers, both on board and port, still do not have smart phone technology/hardware access and need to have hard copies on board. At this point in time, electronic formats, including 'applications or apps' are only suitable for larger scale vessels, and even in the case of EU purse seine vessels, the use of hard copies is relied upon due to on board fish processing and handling conditions, as well as weather conditions.</p>	SC17.38	<p><i>IOTC species identification cards</i></p> <p>(para. 129) NOTING the recent online survey distributed by the IOTC Secretariat, the SC strongly RECOMMENDED that the IOTC Secretariat ensure that hard copies of the identification cards continue to be printed as many CPCs scientific observers, both on board and port, still do not have smart phone technology/hardware access and need to have hard copies on board. At this point in time, electronic formats, including 'applications or apps' are only suitable for larger scale vessels, and even in the case of EU purse seine vessels, the use of hard copies is relied upon due to on board fish processing and handling conditions, as well as weather conditions.</p>	<p>Update: IOTC Secretariat [Ongoing] – It is the intention that hard copies will continue to be printed of the ID Cards, and a gradual transition to electronic formats will occur in the coming years. Funds for printing will come from a range of sources, including the IOTC regular budget.</p>
WPB12.05	<p>Recreational and sports fisheries for marlins and IP sailfish in the Indian Ocean</p> <p>(para. 63): NOTING that in 2011, the Chair of the WPB, in collaboration with the IOTC Secretariat, participating billfish foundations and other interested parties, commenced a process to facilitate the acquisition of catch-and-effort and size data from sport fisheries, by developing and disseminating reporting forms to Sport Fishing Centres in the region, the WPB RECOMMENDED that the Chair and Vice-Chair work in collaboration with the IOTC Secretariat and the African Billfish Foundation to find a suitable funding source and lead investigator to undertake the project outlined in Appendix VI. The aim of the project will be to enhance data recovery from sports and other recreational fisheries in the western Indian Ocean region. The IOTC Secretariat shall circulate the concept note to potential funding bodies on behalf of the WPB. A similar concept note could be developed for other regions in the IOTC area of competence at a later date.</p>	SC17. Para 35	<p><i>Recreational and sports fisheries for marlins and IP sailfish in the Indian Ocean</i></p> <p>NOTING that in 2011, the Chair of the WPB, in collaboration with the IOTC Secretariat, participating billfish foundations and other interested parties, commenced a process to facilitate the acquisition of catch-and-effort and size data from sport fisheries, by developing and disseminating reporting forms to Sport Fishing Centres in the region, the SC REQUESTED that the Chair and Vice-Chair of the WPB, work in collaboration with the IOTC Secretariat and the African Billfish Foundation to find a suitable funding source and lead investigator to undertake the project outlined in Appendix VI of the WPB12 Report. The aim of the project is to enhance data recovery from sports and other recreational fisheries in the western Indian Ocean region. The IOTC Secretariat shall circulate the concept note to potential funding bodies on behalf of the WPB. A similar concept note could be developed for other regions in the</p>	<p>Update: IOTC Secretariat [Ongoing] – The TORs have been circulated for potential funding.</p>



			IOTC area of competence at a later date.	
WPB12.06	<p>Shortbill spearfish</p> <p>(para. 154): NOTING 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 RECOMMENDED that the SC consider requesting the Commission to include it in the list of species to be managed by the IOTC.</p>	SC17.09	<p>Shortbill spearfish</p> <p>(para. 36) NOTING 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 SC RECOMMENDED that the Commission include it in the list of species to be managed by the IOTC.</p>	<p>Update: IOTC Secretariat [Pending] – Pending discussion at the next Session of the Commission.</p>
WPB12.07	<p>Tier approach for providing stock status advice</p> <p>(para. 159): The WPB RECOMMENDED that the Scientific Committee consider adopting a process to determine if a 'Tier' approach to providing stock status advice will likely enable the IOTC working parties to better communicate the levels of uncertainty present in the indicators used for monitoring the condition/status of IOTC stocks by categorising the types of assessments conducted, for the development of management advice/actions. Initial details of how a 'Tier' approach may be constructed are provided in Appendix XII.</p>	SC17. Para 128	<p>Tier approach for providing stock status advice</p> <p>The SC CONSIDERED the proposal from the WPB to adopt a process to determine if a 'Tier' approach to providing stock status advice will likely enable the IOTC working parties to better communicate the levels of uncertainty present in the indicators used for monitoring the condition/status of IOTC stocks by categorising the types of assessments conducted, for the development of management advice/actions. Initial details of how a 'Tier' approach may be constructed are provided in Appendix XII of the WPB12 Report. The SC REQUESTED that the Chair of the WPM shall liaise with interested scientists to develop a revised proposal that includes the experience of other bodies, such as ICES, for consideration at the next SC meeting.</p>	<p>Update: IOTC Secretariat [Pending] – Was added to the Program of Work for the WPM in 2015. A Recommendation on this topic will be provided to the SC at its 18th Session.</p>
WPB12.08	<p>Revision of the WPB Program of work (2015–2019)</p> <p>(para. 160): The WPB RECOMMENDED that the SC consider and endorse the WPB Program of Work (2015–2019), as provided at Appendix XIII.</p>	SC17. Para. 177 SC17. Para 178	<p>Program of Work (2015–2019) and assessment schedule</p> <p>The SC NOTED the proposed Program of Work and priorities for each of the Working Parties and AGREED to a consolidated Program of Work as outlined in Appendix XXXVIII. The Chairs and Vice-Chairs of each working party 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.</p> <p>The SC REQUESTED that during the 2015 Working Party meetings, each group not only develop a Draft Program of Work for the next five years containing low, medium and</p>	<p>Update: [Ongoing]</p> <p>The Program of Work for 2015–2019, as adopted by the Scientific Committee is available for download from the IOTC website: http://iotc.org/science/wp/working-party-billfish-wpb</p>

			high priority projects, but that all High Priority projects are ranked. The intention is that the SC would then be able to review the rankings and develop a consolidated list of the highest priority projects to meet the needs of the Commission. Where possible, budget estimates should be determined, as well as the identification of potential funding sources.	
WPB12.09	<p>Hiring of a consultant to assist the WPB with data poor stock assessment approaches</p> <p>(para. 165): The WPB RECOMMENDED that a consultant be hired to assist in building capacity among the WPB participants by supplementing the skill set available within IOTC CPCs to develop data poor stock assessment approaches for billfish stocks. An indicative budget is provided at Table 24.</p> <p>Table 24. Estimated budget required to hire a consultant to carry out data poor stock assessment on billfish species in 2015 and 2016.</p>	SC17.48	<p>Consultants</p> <p>(para. 183) NOTING the highly beneficial and relevant work done by IOTC stock assessment consultants in 2014 and in previous years, the SC RECOMMENDED that engagement by consultants be continued for each coming year based on the Program of Work (Appendix XXXVIII), to supplement the skill set available within the IOTC Secretariat and CPCs. An indicative budget is provided at Table 6.</p> <p>TABLE 6. Estimated budget required to hire a consultant to carry out stock assessments on tuna and tuna-like species under the IOTC mandate, sharks frequently caught by IOTC fisheries, and capacity building, in 2015 and 2016.</p> <p>Note: 2015 and 2016 each: US\$11750. The SC indicated that this was a Medium priority.</p>	<p>Update: [On hold] As the SC17 prioritised this a 'Medium' priority compared to other consultancies, it is unlikely that this will be budgeted by the Commission in 2015.</p>
WPB12.10	<p>Consolidated recommendations of the 12th Session of the Working Party on Billfish</p> <p>(para. 169): The WPB RECOMMENDED that the Scientific Committee consider the consolidated set of recommendations arising from WPB12, provided at Appendix XIV, 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 2014 (Fig. 11):</p> <ul style="list-style-type: none"> ○ Swordfish (<i>Xiphias gladius</i>) – Appendix VII ○ Black marlin (<i>Makaira indica</i>) – Appendix VIII ○ Blue marlin (<i>Makaira nigricans</i>) – Appendix IX ○ Striped marlin (<i>Tetrapturus audax</i>) – Appendix X 	SC17.02	<p>Billfish</p> <p>(para. 147) 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 three species assigned a stock status in 2014 (Fig. 5):</p> <ul style="list-style-type: none"> ○ Swordfish (<i>Xiphias gladius</i>) – Appendix XVI ○ Black marlin (<i>Makaira indica</i>) – Appendix XVII ○ Blue marlin (<i>Makaira nigricans</i>) – Appendix XVIII ○ Striped marlin (<i>Tetrapturus audax</i>) – Appendix XIX ○ Indo-Pacific sailfish (<i>Istiophorus platypterus</i>) – 	<p>Update: – [Pending] – To be considered at the next Commission meeting.</p>

<p>○ Indo-Pacific sailfish (<i>Istiophorus platypterus</i>) – Appendix XI</p>  <p>Fig. 11. Combined Kobe plot for swordfish (black), black marlin (light blue), blue marlin (brown) and striped marlin (grey) showing the 2013 and 2014 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.</p>	<p>Appendix XX</p>  <p>Fig. 5. Combined Kobe plot for swordfish (black: 2014), black marlin (light blue: 2014), blue marlin (brown: 2013) and striped marlin (grey: 2013) showing the estimates of current stock size (SB or B, species assessment dependent) and current fishing mortality (F) in relation to the interim target spawning stock size and interim target fishing mortality. Cross bars illustrate the range of uncertainty from the model runs.</p>	
---	---	--

WPB12 Report	WPB12 REQUESTS	Update/Progress
Para. 7	<p>The WPB NOTED that in 2013, the SC endorsed a range of research requests by the WPB11. A subset of those requests and the associated responses from the WPB12 are provided below for reference:</p> <ul style="list-style-type: none"> • Historical data series <ul style="list-style-type: none"> ○ The SC[WPB] REQUESTED that both Japan and Taiwan,China undertake an historical review of their longline fleets 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. ○ Response: Both Japan and Taiwan,China have committed to provide updates at the next WPB meeting in 2015. Taiwan,China indicated that it 	<p>Update:</p> <p>Japan & Taiwan,China – [update pending]</p>

	<p>had already commenced work in this regard.</p> <ul style="list-style-type: none"> • Data inconsistencies <ul style="list-style-type: none"> ○ <i>Noting the progress made to date, the WPB REQUESTED 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 provided by Japan, Taiwan, China, Seychelles and EU, Spain and to report final results at the next WPB meeting.</i> ○ Response: Although attempts have been made to complete this task, high levels of uncertainty in the data currently held at the IOTC Secretariat have prevented a meaningful conclusion. Further efforts will be made in 2014/15. • Indo-Pacific sailfish - other <ul style="list-style-type: none"> ○ <i>NOTING that limited new information on I.P. sailfish were presented at the WPB11, the WPB REQUESTED that the IOTC Secretariat contact scientists from the U.A.E. to obtain the latest information from the sailfish fishery in the Gulf, as the most recent information submitted to the WPB some time ago suggested that the fishery may be collapsing. Any new information received should be submitted to the next WPB meeting as part of a general review of sailfish fisheries in the Indian Ocean.</i> ○ Response: Although attempts have been made to obtain the data requested, at this point these have been unsuccessful. Further attempts will be made in 2014/15. 	<p>IOTC Secretariat [update pending] – The IOTC Secretariat is currently working with Japan and Taiwan, China on further analysis to understand the reason for the inconsistencies in average weights reported by the size data and catch-and-effort. Currently:</p> <ul style="list-style-type: none"> ➤ The IOTC Secretariat has requested clarification from Taiwan, China on the size bins used to record length frequencies for billfish. ➤ The IOTC Secretariat has also requested from Japan confirmation of further analysis in 2015, and offered to collaborate on a joint-paper based on the results of analyses by the Secretariat presented at WPDCS in December 2014. <p>Due to limited resources – both at the country level and at the IOTC Secretariat in 2015 – limited progress may be possible on resolving issues with billfish average weights (i.e., with most of the focus on inconsistencies for tropical tuna species).</p> <p>IOTC Secretariat [Pending] – The IOTC Secretariat has made attempts to contact relevant UAE scientists and a response is pending.</p>
<p>Para. 11</p>	<p>Guidelines for CPUE and stock assessments RECALLING the outcomes of the informal workshop on CPUE standardisation, which include the following request of the SC: <i>The SC EXPRESSED concern that the majority of the important recommendations issued by the SC to the various working parties in previous years in regards to CPUE standardisation have often not been addressed, and that there was no major progress on these issues during the past two years. Therefore, the SC REQUESTED that the scientists in charge of this work make every possible effort to consider those guidelines in future CPUE standardisation work in order to improve the quality of CPUE series which are essential to stock assessments.</i></p> <p>and NOTING IOTC Recommendation 14/07 discussed in para. 10 above, the WPB REQUESTED that the IOTC Secretariat facilitate the updating of the ‘Guidelines for the presentation of stock assessment models’ (provided in paper IOTC-2014-WPB12-INF01), with the new elements from Recommendation 14/07 and the new CPUE standardisation guidelines. A draft update shall be submitted to the Scientific</p>	<p>Update: IOTC Secretariat [Completed] – The SC at its 17th Session adopted revised guidelines which are provided as paper IOTC-2015-WPB13-INF01 on the WPB13 meeting page: http://iotc.org/meetings/13th-working-party-billfish-wpb13</p>

	Committee for its consideration in December 2014, and presented by the SC Chair.	
Para. 14	<p>Meeting participation fund The WPB REQUESTED that as 4 of the 8 applications approved for funding by the WPB MPF selection panel were rejected by the IOTC Secretariat due to insufficient funds (Madagascar, Malaysia, Mozambique and Thailand), a detailed explanation (including a budget breakdown recipient) of how the entire MPF available for 2014 (from the IOTC Regular budget (US\$60,000) and via budget savings (e.g. ICRU, or other sources)), be provided to the SC for its consideration at its 17th Session to be held in December 2014. For transparency purposes, the explanation shall also include a detailed list of those candidates who's funding request was rejected.</p>	<p>Update: Partially Completed. The IOTC Secretariat provided details of the MPF expenditure in paper IOTC-2014-SC17-05 Rev_1 – Report of the Secretariat for 2014 (see Appendix III). The breakdown of individuals was not included.</p>
Para. 23	<p>Update/progress paper The WPB REQUESTED that the IOTC Secretariat continue to prepare a paper on the progress of the recommendations arising from the previous WPB, incorporating the final recommendations adopted by the Scientific Committee and endorsed by the Commission.</p>	<p>Update: Completed for 2015 and Ongoing annually.</p>
Para. 30	<p>Review of data available at the secretariat for swordfish The WPB NOTED 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 V, and REQUESTED 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.</p>	<p>Update: CPCs [update pending] –</p>
Para. 33	<p>Glossary of terms The WPB REQUESTED that the IOTC Secretariat ensure that the following terms are provided to the Consultant hired to undertake the work detailed in para 32: Industrial fisheries: longline fisheries, surface fisheries; and coastal/artisanal fisheries, with the intention that the consultant will provide detailed definitions for each, separately or in combination as appropriate.</p>	<p>Update: IOTC Secretariat [Ongoing] – The Consultant, once hired will deal with this matter directly.</p>
Para. 36	<p>I.R. Iran billfish fishery The WPB NOTED that the new data reported by I.R. Iran had been used to revise the historical catch series. However, the lack of catch-and-effort data for the Iranian driftnet fishery compromise estimates of total catch, as the species composition of marlins would vary depending on the areas and times fished. Thus, the WPB REQUESTED that I.R. Iran makes every possible effort to assess the areas and times fished by its fishery and report this information to the next meeting of the WPB.</p>	<p>Update: I.R. Iran [update pending] –</p>

Para. 37	<i>I.R. Iran billfish fishery</i> The WPB REQUESTED that the IOTC Secretariat assist I.R. Iran to assess if separate reporting on Indo-Pacific Sailfish in the Indian Ocean and Gulf is possible.	Update: IOTC Secretariat [Pending] –The IOTC Secretariat has written to I.R. Iran requesting catch-and-effort by time-area, according to the reporting standards of Resolution 10/02, in order to assist with estimation of Indo-Pacific Sailfish by area.
Para. 39	<i>Sri Lanka billfish fishery</i> NOTING the changes in the species composition of billfish landed by Sri Lankan vessels, and the large increase in the catches of billfish recorded between the years 2009 and 2010, the WPB REQUESTED that Sri Lanka explore further the reasons driving those changes and presents this to the next meeting of the WPB.	Update: Sri Lanka [update pending] –
Para. 40	<i>Indian billfish fishery</i> The WPB REQUESTED that India continue to improve its data collection programs and provide catch-and-effort and size frequency data for their longline fleets, to the IOTC Secretariat, as per IOTC data reporting requirements for its longline, surface and coastal/artisanal fisheries.	Update: India [update pending] –
Para. 47	<i>Indonesia billfish fishery and length-weight relationships</i> NOTING that in recent years Indonesia has reported incomplete length frequency data for its longline fishery, from port sampling, and that the data collected through the various observer schemes in Indonesia may be useful to add to the IOTC database, the WPB REQUESTED that Indonesia reports this information prior to the 18 th Session of the Scientific Committee to the IOTC Secretariat.	Update: Indonesia [update pending] –
Para. 64	<i>Recreational and sports fisheries for marlins and IP sailfish in the Indian Ocean</i> The WPB REQUESTED that the African Billfish Foundation continue its important work, particularly in the areas of collaborative research aimed at obtaining more information on movements of billfishes, via both conventional and archival tagging programs that will allow the collection of information on both horizontal and vertical movements as well as on population dynamics.	Update: ABF [update pending] –
Para. 65	The WPB RECALLED the following paragraphs from the previous WPB meeting (WPB11) targeted at specific CPCs with active recreational and sports fisheries for billfish in the Indian Ocean, that are likely to contribute substantially to the total marlin and IP sailfish catches, and REQUESTED updates to be provided before the next WPB meeting in 2015: <ul style="list-style-type: none"> • <i>Kenyan sailfish sports fishery:</i> <ul style="list-style-type: none"> ➢ <i>The WPB NOTED that catch and effort data for the sports fishery in Kenya from 1987–2010 should be submitted to the IOTC Secretariat to assist in future assessments for these species.</i> ➢ <i>The WPB REQUESTED that Kenya undertake a comprehensive analysis based on their long-term sport fisheries for consideration at the next WPB meeting.</i> 	Update: Kenya [update pending] –

	<ul style="list-style-type: none"> • Mozambique sports fishery <ul style="list-style-type: none"> ➤ The WPB ENCOURAGED Mozambique to develop a monitoring program of catches and releases of billfish by its sports fishers, and collaborate with the African Billfish Foundation to expand their tagging efforts to Mozambique. ➤ NOTING that Mozambique possess a database of sport fishing clubs in the southern part of the country, the WPB ENCOURAGED the further development the database for northern coastal areas and to share this information with the African Billfish Foundation and the IOTC Secretariat. • Maldives sports fishery <ul style="list-style-type: none"> ➤ The WPB AGREED that although there are currently no sports fishery data collection programs in the Maldives, such programs would be highly beneficial given the rapidly expanding sports fishing industry operating in Maldivian waters. 	<p>Update: Mozambique [update pending] –</p> <p>Update: Mozambique [update pending] –</p> <p>Update: Maldives [update pending] –</p>
Para. 77	<p>Nominal and standardised CPUE indices RECALLING the request from the Commission in 2013 that the southwest region continue to be analysed as a special resource until further notice, in addition to the full Indian Ocean assessment, the WPB REQUESTED that CPCs with longline fleets with important swordfish catches in the southwest Indian Ocean (EU, Taiwan, China and Japan) continue to undertake revised CPUE analysis for their longline fleets in the southwest Indian Ocean, in addition to CPUE analysis for the entire Indian Ocean.</p>	<p>Update: EU [update pending] –</p> <p>Update: Japan [update pending] –</p> <p>Update: Taiwan, China [update pending] –</p> <p>Update: Others [update pending] –</p>
Para. 87	<p>Japan: Indian Ocean swordfish longline CPUE 1971–2013 The WPB REQUESTED that some further investigations be conducted in subsequent years.</p>	<p>Update: Japan [update pending] –</p>
Para. 92	<p>CPUE Summary discussion NOTING that while using production models for stock assessment, standardised CPUE in weight may be more appropriate than by number, in cases where swordfish is not actively targeted, it would be acceptable to develop standardised CPUE in number rather than in weight, the WPB REQUESTED the Scientific Committee consider requesting the WPM to investigate this matter.</p>	<p>Update: WPM Chair [Pending] – This was added to the WPM Program of Work for 2015 and an update will be provided for the SC at its 18th Session.</p>
Para. 121	<p>Parameters for future analyses: CPUE standardization and stock assessments The WPB NOTED the information presented and REQUESTED that, in the future presentation of the equations used to convert from non-standard to standard measurements be based upon a standard agreed to by the WPB. In this way, inter</p>	<p>Update: WPB Chair [update pending] –</p>

	<p>sessional work will be led by the WPB Chair in order to review available equation from peer reviewed and grey literature, check for complementary non-published datasets available upon CPC and propose a set of standard equation at the next WPB for Indian Ocean billfishes.</p>	
Para. 123	<p>Development of management advice for swordfish</p> <p>The WPB ADOPTED the management advice developed for swordfish (<i>Xiphias gladius</i>), as provided in the draft resource stock status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary for swordfish with the latest 2013 catch data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p> <ul style="list-style-type: none"> • Swordfish (<i>Xiphias gladius</i>) – Appendix VII 	<p>Update: Completed. The IOTC Secretariat updated the draft Executive Summaries for the Consideration of the SC. The SC17 ADOPTED a new Executive Summary for this stock, available for download from the IOTC website: http://iotc.org/science/status-summary-species-tuna-and-tuna-species-under-iotc-mandate-well-other-species-impacted-iotc</p>
Para. 125	<p>Review of data available at the IOTC Secretariat for marlins</p> <p>The WPB NOTED the main marlin 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 V, and REQUESTED 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.</p>	<p>Update: CPCs [update pending] –</p>
Para. 136	<p>Parameters for future analyses: stock assessments</p> <p>The WPB REQUESTED that a sensitivity analysis be performed using Stock Reduction Analysis methodology, using different series of catch data to assess how robust the estimation of reference points for management are, and how the stock status determination performs.</p>	<p>Update: WPB Chair [update pending] –</p>
Para. 141	<p>Development of management advice for marlins</p> <p>The WPB ADOPTED the management advice developed for marlins as provided in the draft resource stock status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary for marlins with the latest 2013 catch data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p> <ul style="list-style-type: none"> • Black marlin (<i>Makaira indica</i>) – Appendix VIII • Blue marlin (<i>Makaira nigricans</i>) – Appendix IX • Striped marlin (<i>Tetrapturus audax</i>) – Appendix X 	<p>Update: Completed. The IOTC Secretariat updated the draft Executive Summaries for the Consideration of the SC. The SC17 ADOPTED a new Executive Summary for this stock, available for download from the IOTC website: http://iotc.org/science/status-summary-species-tuna-and-tuna-species-under-iotc-mandate-well-other-species-impacted-iotc</p>
Para. 143	<p>Review of data available at the Secretariat for Indo-Pacific sailfish</p> <p>The WPB NOTED the main sailfish 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 V, and REQUESTED that the CPCs listed in the Appendix, make efforts to remedy the data issues identified and to</p>	<p>Update: CPCs [update pending] –</p>

	report back to the WPB at its next meeting.	
Para. 149	<p><i>Selection of Stock Status indicators for Indo-Pacific sailfish</i> The WPB REQUESTED that the IOTC Secretariat contact scientists from the U.A.E. to obtain the latest information from the I.P. sailfish fishery in the Gulf, as the most recent information submitted to the WPB some time ago suggested that the fishery may be collapsing or have collapsed. Any new information received should be submitted to the next WPB meeting as part of a general review of I.P. sailfish fisheries in the Indian Ocean.</p>	<p>Update: IOTC Secretariat [Pending] – The IOTC Secretariat has made attempts to contact relevant UAE scientists and a response is pending.</p>
Para. 150	<p><i>Development of management advice for Indo-Pacific sailfish</i> The WPB ADOPTED the management advice developed for Indo-Pacific sailfish (<i>Istiophorus platypterus</i>), as provided in the draft resource stock status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary for Indo-Pacific Sailfish with the latest 2013 catch data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration:</p> <ul style="list-style-type: none"> o Indo-Pacific sailfish (<i>Istiophorus platypterus</i>) – Appendix XI 	<p>Update: Completed The IOTC Secretariat updated the draft Executive Summaries for the Consideration of the SC. The SC17 ADOPTED a new Executive Summary for this stock, available for download from the IOTC website: http://iotc.org/science/status-summary-species-tuna-and-tuna-species-under-iotc-mandate-well-other-species-impacted-iotc</p>
Para. 167	<p><i>Date and place of the 13th Session of the Working Party on Billfish</i> The WPB AGREED on the importance of having IOTC working party meetings within key CPCs catching species of relevance to the working party, in this case on billfish. Following a discussion on who would host the 13th and 14th Sessions of the WPB in 2015 and 2016 respectively, the WPB REQUESTED that the IOTC Secretariat liaise with EU, Portugal to determine if they would be able to host the 13th Session. The WPB should continue to be held in conjunction with the Working Party on Ecosystems and Bycatch. The meeting locations will be communicated by the IOTC Secretariat to the SC for its consideration at its next session to be held in December 2014. As swordfish was would not be a priority for stock assessment in these two years, the meeting should be held early in the year as detailed in Table 25.</p>	<p>Update: Completed The WPB13 will be hosted by Portugal.</p>