
PROGRESS MADE ON THE RECOMMENDATIONS OF WPEB12

PREPARED BY: IOTC SECRETARIAT¹ AND CHAIR
LAST UPDATED: 23 AUGUST 2017

PURPOSE

To provide participants at the 13th WPEB with an update on the progress made in implementing those recommendations from the previous Working Party on Ecosystems and Bycatch (WPEB) 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 12th Session of the WPEB, 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 WPEB was provided to the SC for its endorsement at its December 2016 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.

¹ secretariat@iotc.org

In addition to the Recommendations endorsed by the SC at its 19th 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 WPEB13.

RECOMMENDATION

That the WPEB **NOTE** the progress made in implementing the recommendations and requests of the 12th Session of the WPEB, 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 WPEB12

APPENDIX I

Progress made on the recommendations and requests of WPEB12 and SC19

WPEB12 Rec. No.	Recommendation from WPEB12	SC19 Rec. No.	Recommendation adopted by the SC19	Progress/Comments
WPEB12. 01	<p>Identification guides for fishing gear</p> <p>(Para. 21)The WPEB RECALLED the recommendation made by the WPEB in 2013 and 2014: Noting the continued confusion in the terminology of various hook types being used in IOTC fisheries, (e.g. tuna hook vs. J-hook; definition of a circle hook), the WPEB RECOMMENDED that the Commission allocate funds in the 2014 IOTC Budget to develop an identification guide for fishing hooks and pelagic fishing gears used in IOTC fisheries. The total estimated production and printing costs for the first 1000 sets of the identification cards is around a maximum of US\$16,500. 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.</p>	SC19.16	<p>Identification guides for fishing gear</p> <p>(para. 55) The SC RECALLED the recommendation made by the WPEB in 2013 and 2014: Noting the continued confusion in the terminology of various hook types being used in IOTC fisheries, (e.g. tuna hook vs. J-hook; definition of a circle hook), the SC RECOMMENDED that the Commission allocate funds in the 2014 IOTC Budget to develop an identification guide for fishing hooks and pelagic fishing gears used in IOTC fisheries. The total estimated production and printing costs for the first 1000 sets of the identification cards is around a maximum of US\$16,500. 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.</p>	<p>Update: [Ongoing]</p> <p>The WPEB12 ENCOURAGED all participants to bring examples of the types of hooks used by their domestic longline fisheries to the next WPEB to begin the process of collecting terminal gear information.</p> <p>This is to be discussed further during the WBEP13</p>
WPEB12. 02	<p>Regional observer scheme</p> <p>(Para. 54) RECALLING the SC18 (para. 134) “NOTING that many CPCs report Regional Observer data in .pdf format, or as data embedded within documents, and also in hard-copy format, the SC ENCOURAGED CPCs to report Regional Observer data in any non-proprietary electronic format (e.g. csv, xml, txt, etc.) or in an electronic format that can be easily exported and processed into standard spreadsheet, database or statistical software (e.g. xls, dbase, mdb, etc.). This may be in any electronically readable format as long as all of the agreed minimum data reporting requirements have been fulfilled”, the WPEB RECOMMENDED that observer data are submitted in electronic format that could be automatically exported and processed into a standard spreadsheet-like format (e.g. csv, xml, txt, xls, dbase, mdb etc.), avoiding formats whose</p>	SC19.17	<p>Regional observer scheme</p> <p>(para. 56) RECALLING the SC18 (IOTC–2015–SC18–R, para. 134): “NOTING that many CPCs report Regional Observer data in .pdf format, or as data embedded within documents, and also in hard-copy format, the SC ENCOURAGED CPCs to report Regional Observer data in any non-proprietary electronic format (e.g. csv, xml, txt, etc.) or in an electronic format that can be easily exported and processed into standard spreadsheet, database or statistical software (e.g. xls, dbase, mdb, etc.). This may be in any electronically readable format as long as all of the agreed minimum data reporting requirements have been fulfilled”. the SC RECOMMENDED all CPCs to submit observer data in an electronic format that can be automatically exported and processed into a standard spreadsheet-like format (e.g. csv, xml, txt, xls, dbase, mdb etc.), avoiding formats whose</p>	<p>Update: [Ongoing]</p> <p>An increasing number of CPCs are now submitting data electronically, including Australia, EU,France, EU,Spain, China (partial), Indonesia, Japan, Mozambique and Mauritius (partial)</p>

	processing could be time consuming and unnecessarily complex (e.g. pdf, Microsoft Word documents etc.), at the same time ensuring that all of the agreed minimum data reporting requirements have been fulfilled.		processing could be time consuming and unnecessarily complex (e.g. pdf, Microsoft Word documents etc.), at the same time ensuring that all of the agreed minimum data reporting requirements have been fulfilled.	
WPEB12.03	<p>Bycatch data exchange protocol (BDEP)</p> <p>(Para. 62) The WPEB RECOMMENDED that, on completion of the development of the ROS database and the input of all of the historical data, the IOTC Secretariat continue to populate the BDEP template, adapting it where necessary, and present this to the WPDCS and SC for further review.</p>	SC19.19	<p>Bycatch data exchange protocol (BDEP)</p> <p>(para. 58) The SC RECOMMENDED that, on completion of the development of the ROS database and the input of all of the historical data, the IOTC Secretariat continue to populate the BDEP template, adapting it where necessary, and present this to the WPDCS and SC for further review.</p>	<p>Update: [Ongoing]</p> <p>The ROS database development is now complete and the processing of inputting historical reported data has just begun (a first data extraction of JPN observer data from 2014-2016 has been completed). This process will be time consuming given the number of inconsistencies in the reported datasets in terms of format, content, code lists etc, however, the sufficient resources are available and the work is ongoing through a consultancy project.</p> <p>On completion of this task, the Secretariat has agreed to collate all the relevant observer data from the ROS regional database into the BDEP format to enhance data exchange with other institutions. Testing of the export facilities for this is currently under way.</p>
WPEB12.04	<p>Tuna gillnet fisheries</p> <p>(Para. 105) RECALLING the previous recommendation from the Scientific Committee, the WPEB RECOMMENDED that this is reiterated: “NOTING that gillnets are regularly being used with lengths in excess of 4,000 m (and up to 7,000 m) within and occasionally beyond the EEZ of Pakistan and other IOTC CPCs in the region, and that those used within the EEZ may sometimes drift onto the high seas in contravention of Resolution 12/12, the SC</p>	SC19.20	<p>Gillnet fisheries</p> <p>(para. 59) NOTING that gillnets are regularly being used with lengths in excess of 4,000 m (and up to 7,000 m) within and occasionally into the high seas, and that those used within the EEZ may sometimes drift onto the high seas in contravention of Resolution 12/12, the SC reiterated its previous RECOMMENDATION that the Commission should consider if a ban on large scale gillnets should also apply within IOTC CPC EEZ. This would be especially</p>	<p>Update:</p> <p><i>Resolution 17/07 On the prohibition to use large-scale driftnets in the IOTC Area</i> was adopted at the 21st session of the Commission.</p> <p>The resolution includes a requirement that ‘<i>For the purposes of monitoring the implementation of this Resolution, CPCs must notify the Secretariat of</i></p>

	<i>RECOMMENDED that the Commission should consider if a ban on large scale gillnets should also apply within IOTC CPC EEZ. This would be especially important given the negative ecological impacts of large scale drifting gillnets in areas frequented by marine mammals and turtles” (SC18 para. 39).</i>		important given the negative ecological impacts of large scale drifting gillnets in areas frequented by marine mammals and turtles.	<i>any CPC-flagged vessel using large-scale driftnets in their EEZs before the 31st of December 2020.’</i>
WPEB12.05	ACAP best practice advice: update (Para. 216) The WPEB RECOMMENDED that Resolution 12/06 be reviewed and ENCOURAGED the line weighting specifications to be updated to conform with the latest ACAP advice: (a) 40 g or greater attached within 0.5 m of the hook; or (b) 60 g or greater attached within 1 m of the hook; or (c) 80 g or greater attached within 2 m of the hook. CPCs are ENCOURAGED to test the safety and practicality of the above mentioned measure as well as sliding lead devices for line weighting, and to report the results back to the WPEB or SC.	SC19.22	ACAP best practice advice: update (para. 68) The SC RECOMMENDED that Resolution 12/06 be reviewed and ENCOURAGED the line weighting specifications to be updated to conform with the latest ACAP advice: (a) 40 g or greater attached within 0.5 m of the hook; or (b) 60 g or greater attached within 1 m of the hook; or (c) 80 g or greater attached within 2 m of the hook. CPCs are ENCOURAGED to test the safety and practicality of the above mentioned measure as well as sliding lead devices for line weighting, and to report the results back to the WPEB or SC.	Update: [Pending]
WPEB12.06	(Para. 219) The WPEB RECOMMENDED that when Resolution 12/06 is reviewed, the two hook-shielding devices recommended by ACAP as best practice mitigation measures be incorporated as additional, stand-alone mitigation options for use in IOTC fisheries operating south of 25°S, and that these measures should conform with the technical specifications and performance attributes detailed in the ACAP advice. The WPEB CLARIFIED that if used, the hook-shielding devices would not need to be combined with any other mitigation measure. In relation to the Smart Tuna Hook, the WPEB NOTED that on the basis of information provided, after release from the hook the shield sinks to the seafloor where it corrodes within 12 months, the byproduct of which is iron oxide and carbon. However, the WPEB NOTED concerns regarding pollution associated with the discarded shields of the Smart Tuna Hooks, and REQUESTED that further information be made available to clarify the potential effects.	SC19.23	(para. 69) The SC RECOMMENDED that when Resolution 12/06 is reviewed, the two hook-shielding devices recommended by ACAP as best practice mitigation measures be incorporated as stand-alone mitigation options for use in IOTC fisheries operating south of 25°S, and that these measures should conform with the technical specifications and performance attributes detailed in the ACAP advice. The SC CLARIFIED that if used, the hook-shielding devices would not need to be combined with any other mitigation measure. In relation to the Smart Tuna Hook, the SC NOTED that on the basis of information provided, after release from the hook the shield sinks to the seafloor where it corrodes within 12 months, the byproduct of which is iron oxide and carbon. However, the SC NOTED concerns regarding pollution associated with the discarded shields of the Smart Tuna Hooks, and REQUESTED that further information be made available to clarify the potential effects.	Update: [Pending]

<p>WPEB12.07</p>	<p>Data collection opportunities</p> <p>(Para. 225) The WPEB RECOGNISED that although the IOTC Regional Observer Programme (ROP) for transshipment is primarily a mechanism for compliance monitoring, it does provide potential opportunities for gathering photographs and information for scientific purposes, including on seabird bycatch mitigation measures. Therefore, the WPEB RECOMMENDED that the collection of seabird bycatch mitigation photographs through the ROP is trialled as a pilot.</p>	<p>SC19.21</p>	<p>Data collection opportunities</p> <p>(para. 60) The SC RECOGNISED that although the IOTC Regional Observer Programme (ROP) for transshipment is primarily a mechanism for compliance monitoring, it does provide potential opportunities for gathering photographs and information for scientific purposes, including on seabird bycatch mitigation measures. Therefore, the SC RECOMMENDED that the collection of seabird bycatch mitigation photographs through the ROP is trialled as a pilot.</p>	<p>Update: [Ongoing]</p> <p>A request was submitted by ABNJ tune Project which was circulated to all relevant Members on 4th May 2017. Based on the responses a revised agreement was established and work is currently underway to extract the relevant scientific information from the photographic data available through the ROP.</p>
<p>WPEB12.08</p>	<p>Revision of the WPEB Program of Work 2017–2021</p> <p>(Para. 245) The WPEB RECOMMENDED that the SC consider and endorse the WPEB Program of Work (2017–2021), as provided at Appendix XVIII.</p>	<p>SC19. Para. 170</p>	<p>Program of Work (2017–20210)</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 XXXIVa-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>	<p>Update: [Completed]</p> <p>The Program of Work for 2017–2021 was adopted by the Scientific Committee and is available for download from the IOTC website: www.iotc.org/science/wp/working-party-ecosystems-and-bycatch-wpeb</p>
<p>WPEB12.09</p>	<p>Review of the draft, and adoption of the Report of the 12th Session of the Working Party on Ecosystems and Bycatch</p> <p>(Para. 254) The WPEB RECOMMENDED that the Scientific Committee consider the consolidated set of recommendations arising from WPEB12, provided at Appendix XIX, as well as the management advice provided in the draft resource stock status summary for each of the seven shark species, as well of those for marine turtles and seabirds:</p> <p>Sharks</p> <ul style="list-style-type: none"> ○ Blue sharks (<i>Prionace glauca</i>) – Appendix IX ○ Oceanic whitetip sharks (<i>Carcharhinus longimanus</i>)– Appendix X 	<p>SC19. Para. 52</p> <p>SC19.04</p>	<p>The SC NOTED the report of the 12th Session of the Working Party on Ecosystems and Bycatch (IOTC–2016–WPEB12–R), including the consolidated list of recommendations provided as an appendix to the report.</p>	<p>Update: [Completed]</p>

WPEB11 Report	WPEB11 REQUESTS	Update/Progress
Para. 9	<p>Meeting Participation Fund (MPF)</p> <p>The WPEB RECALLED the recommendation by the SC18: “<i>The WPEB RECOMMENDED that the IOTC Rules of Procedure (2014), for the administration of the Meeting Participation Fund be modified so that applications are due not later than 60 days (current deadline is 45 days), and that the full Draft paper be submitted no later than 45 days (current deadline is 15 days) before the start of the relevant meeting, so that the Selection Panel may review the full paper rather than just the abstract, and provide guidance on areas for improvement, as well as the suitability of the application to receive funding using the IOTC MPF. The earlier submission dates would also assist with Visa application procedures for candidates (para.98).</i>” and REQUESTED that the Rules of Procedure are updated to include the revised deadlines so that a draft can be presented to the S21 for approval in 2017.</p>	<p>Update: [Pending] The Rules of Procedure were not updated at the S21 meeting as no delegation proposed an amendment. This will remain pending until a delegation proposes a revision to the deadlines.</p>
Para. 14	<p>Progress on the recommendations of WPEB12</p> <p>The WPEB REQUESTED that the IOTC Secretariat continue to prepare a paper on the progress of the recommendations arising from the previous WPEB, incorporating the final recommendations adopted by the Scientific Committee and endorsed by the Commission, as well as any updates and requests.</p>	<p>Update: [Completed]</p>
Para. 19	<p>Species identification cards</p> <p>NOTING the difficulties with the identification of dead seabirds, the WPEB REQUESTED that the guides developed by ACAP and JFRA are made available via the IOTC website in the languages of relevance to IOTC CPCs.</p>	<p>Update: [Completed] These have been made available through the IOTC website: www.iotc.org/science/species-identification-cards</p>
Para. 20	<p>NOTING the recommendation of the SC18 “<i>The SC RECOMMENDED that the Commission allocate funds in its 2016/2017 budget, to produce and print the IOTC best practice guidelines for the safe release and handling of encircled cetaceans. The guidelines could be incorporated into a set of IOTC cetacean identification cards: Cetacean identification for Indian Ocean fisheries</i>”(para.102), the WPEB REQUESTED that the IOTC Secretariat works with the authors of paper IOTC–2014–WPEB10–32 to develop the project further.</p>	<p>Update: [Ongoing] A consultant has been recruited, an agreement has been reached with SPC to share illustrations and the Marine Mammal Commission (MMC) will be supporting printing and translation of the ID guides. Further discussions are underway with OPAGAC to support the translation and printing of the guides into Spanish.</p> <p><i>Priority languages for translation are to be identified by the WPEB13.</i></p>
Para. 27	<p>Shark tagging programs: Indian Ocean</p> <p>ACKNOWLEDGING that partial funding has been identified for this project, the WPEB REQUESTED that the authors develop a revised concept note for the remaining activities for consideration by other potential funding bodies.</p>	<p>Update: [Ongoing] EUR 153,000 has been identified for this project and discussion are underway to prioritise the spending which is due to take place before March 2018.</p>

<p>Para. 29</p>	<p>IOTC database</p> <p>The WPEB NOTED the main data issues that are considered to negatively affect the quality of the statistics for bycatch species available at the IOTC Secretariat, by species group, type of dataset and fishery, which are provided in <u>Appendix V</u>, and REQUESTED that the CPCs listed in the Appendix make efforts to remedy the data issues identified and to report back to the WPEB at its next meeting</p>	<p>Update: [Ongoing]</p>
<p>Para. 47</p>	<p>Regional observer scheme – Update (Resolution 11/04 On a regional observer scheme)</p> <p>NOTING that EU,France reports effort for some vessels under 24m which fish within the EEZ, the WPEB REQUESTED EU,France submit these data to the IOTC Secretariat so that their observer coverage rate can be calculated accurately.</p>	<p>Update: [Completed] EU,France has submitted a revised set of observer data, in electronic format, including vessels <24m.</p>
<p>Para. 48</p>	<p>The WPEB NOTED the 100% observer coverage in the EU-Spain tuna purse seine fleet since December 2014 and REQUESTED that the observer trip reports and observer data are submitted to IOTC prior to the Working Party on Data Collection and Statistics and Scientific Committee as soon as the data is processed and validated.</p>	<p>Update: [Ongoing] EU,Spain has submitted observer data for the purse seine fishery in ST09 (ICCAT) format for 2015. However, there is no information on fishing days by which to calculate coverage rates.</p>
<p>Para. 50</p>	<p>ACKNOWLEDGING that the ROS came into force in July 2010, the WPEB REQUESTED that Appendix B in paper IOTC-2016-WPEB12-09 is revised so that the total effort from the Japanese fleet is also only included from July 2010.</p>	<p>Update: [Completed] This was revised in 2016 and presented in paper IOTC-2016-SC19-07 Rev_1</p>
<p>Para. 51</p>	<p>The WPEB NOTED the data that has been collected by the crew-observer or self-sampling scheme led by WWF-Pakistan and ENCOURAGED WWF-Pakistan to continue with the good work the has been started and REQUESTED that these are submitted formally to IOTC through the appropriate government channels</p>	<p>Update: [Ongoing]</p> <p>Some revised nominal catch data have been submitted for the period 1999-2016 for the main IOTC species (no bycatch), however, these are substantially different to previous estimates and so work is ongoing between the Government of Pakistan and the IOTC Secretariat to make changes to the database where appropriate (no changes have been made as yet).</p>
<p>Para. 55</p>	<p>NOTING that many CPCs already have established observer data management systems in place, the WPEB REQUESTED the IOTC Secretariat provide a template for observer data to be submitted as flat files extracted from national databases, according to the data reporting requirements agreed by the SC17.</p>	<p>Update: [Ongoing] A first data extraction of JPN observer data (2014-2016) from submitted “flat” files has been performed. Furthermore, with the development of the ROS e-Reporting system, observer data can now also be submitted through XML files which should be particularly convenient for those flag countries that already have well established DBs and observer data management systems in place.</p>
<p>Para. 66</p>	<p>Pilot projects under Resolution 16/04</p> <p>The WPEB REQUESTED the IOTC Secretariat liaise with the WPEB Chair and Vice Chair as well as the SC Chair to develop the ToRs, guidelines, work of observers and indicative budget intersessionally, and submit it for the WPDCS and SC19 to review.</p>	<p>Update: [Ongoing] This was developed further (document IOTC-2016-SC19-14) and discussed in detail at the SC19 and was subsequently revised further, circulated to all Members for comment and presented to the Commission where it was approved (paper IOTC-2017-S21-10).</p> <p><i>The Commission noted the presentation on the pilot project given by the Chair of the Scientific Committee and ENDORSED the framework as outlined in IOTC-2017-S21-10.</i></p>

		<p>Furthermore the Commission accepted that the Project Steering Committee will be required to advise the Secretariat on a range of critical matters relating to the implementation of the project.</p> <p>The Commission encouraged CPCs, especially those that are likely to be participating in and benefitting directly from the project, to support the initiative further with co-funding. The Commission also AGREED that project activities would begin with the current funding available and that a budget for subsequent phases be prepared for the S22.</p> <p>The Commission REQUESTED nominations from members that want to participate in the Pilot Project Steering Committee to be sent to the Secretariat.</p> <p>The pilot project is now going ahead based on the plan approved by the Commission. More details and updates can be found in paper IOTC-2017-WPEB13-08.</p>
Para. 74	<p><i>NPOA implementation overview</i></p> <p>The WPEB REQUESTED that all CPCs without an NPOA-Sharks and/or NPOA-Seabirds expedite the development and implementation of a NPOA, and to report progress to the WPEB and SC in 2016, NOTING that NPOAs are a framework that should facilitate estimation of shark catches, seabird interactions, and development and implementation of appropriate management measures, which should also enhance the collection of bycatch data and compliance with IOTC Resolutions.</p>	Update: [Ongoing]
Para. 75	<p>The WPEB REQUESTED that the IOTC Secretariat continue to periodically revise the table summarising progress towards the development of NPOA-Sharks, NPOA-Seabirds, and the implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations, by each CPC for the consideration at each WPEB and the SC meeting. The current version is provided at <u>Appendix VIII</u>.</p>	Update: [Ongoing]
Para. 86	<p><i>Ecosystem based fisheries management: tRFMO progress</i></p> <p>ACKNOWLEDGING the importance of developing a template for an Ecosystem Report Card for the Indian Ocean as a starting point to foster the discussion of EBFM within IOTC, the WPEB REQUESTED the authors develop a preliminary template, including a conceptual framework of EBFM, its main components and potential indicators to track the status of the different components for presentation at the next IOTC Scientific Committee meeting with the aim of integrating ecosystem research within management.</p>	Update: [Ongoing] This was developed and presented to the SC19 (IOTC-2016-SC19-12). An update will be provided in paper IOTC-2017-WPEB13-INF05.
Para. 92	<p><i>Bycatch composition: China</i></p> <p>NOTING the lack of size information included in the current study, the WPEB REQUESTED the authors continue analysing the size data and present this at the next WPEB meeting.</p>	Update: [Pending]

Para. 108	<i>Tuna gillnet fisheries: Pakistan</i> The WPEB NOTED that AIS has been piloted on four vessels so far, and there are plans to use technologies such as CCTV footage and REQUESTED that these data are analysed and results are presented at the next meeting.	Update: Pending
Para. 116	<i>Blue shark: intrinsic growth rates and steepness</i> The WPEB THANKED the authors for this is preliminary work conducted in anticipation of the 2017 blue shark stock assessment and REQUESTED that this is further developed for next year.	Update: Completed More details are provided in papers IOTC-2017-WPEB13-20 and IOTC-2017-WPEB13-21
Para. 131.	<i>Consideration of options for alternative management measures for blue shark in the IOTC area of competence</i> The WPEB ADOPTED the management advice developed for blue shark in IOTC fisheries for tuna and tuna-like species, as provided in the draft resource stock status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary for blue shark with the latest 2015 catch data (if applicable), and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration: ○ Blue sharks (<i>Prionace glauca</i>) – <u>Appendix IX</u>	Update: Completed
Para. 134	<i>Shark fishery ban: Maldives</i> The WPEB NOTED that the data collected by the study would be useful for the current IOTC CITES project, and REQUESTED that Maldives liaise with the IOTC Secretariat in terms of sharing of the data.	Update: Completed Information on discarded sharks has been submitted via discards forms for 2013-2016
Para. 145	<i>Shark species identification: Sri Lanka</i> The WPEB REQUESTED that any information on total catches of sharks, by species, be shared with the IOTC Secretariat (in addition to data currently reported by Sri Lanka), to facilitate work currently being undertaken by an IOTC consultant to reconstruct the catch series for blue sharks.	Update: Pending
Para. 163	<i>Hooking mortality: pelagic longliners</i> The WPEB ACKNOWLEDGED the need for best practice guidelines for safe release from longline and gill net gear, noting work being conducted by WWF Pakistan in this regard and REQUESTED that any existing guidelines be distributed more widely for review and trialling.	Update: Ongoing
Para. 169	<i>Consideration of options for alternative management measures for other sharks in the IOTC area of competence</i> The WPEB ADOPTED the management advice developed for a subset of other shark species commonly caught in IOTC fisheries for tuna and tuna-like species, as provided in the draft resource stock status summaries and REQUESTED that the IOTC Secretariat update the draft stock status summary for sharks with the latest 2015 catch	Update: Completed

	<p>data (if applicable), 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"> ○ Oceanic whitetip sharks (<i>Carcharhinus longimanus</i>) – Appendix X ○ Scalloped hammerhead sharks (<i>Sphyrna lewini</i>) – Appendix XI ○ Shortfin mako sharks (<i>Isurus oxyrinchus</i>) – Appendix XII ○ Silky sharks (<i>Carcharhinus falciformis</i>) – Appendix XIII ○ Bigeye thresher sharks (<i>Alopias superciliosus</i>) – Appendix XIV ○ Pelagic thresher sharks (<i>Alopias pelagicus</i>) – Appendix XV 	
Para. 182	<p>Development of management advice on the status of marine turtle species</p> <p>The WPEB ADOPTED the management advice developed for marine turtles, as provided in the draft status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary with the latest 2015 interaction 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"> ● Marine turtles (Appendix XVI). 	Update: Completed
Para. 187	<p>Seabird interactions: Spanish longline fleet The WPEB REQUESTED that when presenting information on seabird bycatch, authors should include the technical specifications of mitigation measures used, especially in relation to line-weighting. This should include the mass and type of weights used, and the distance from the hook at which the weights are attached.</p>	Update: Ongoing
Para. 217	<p>ACAP best practice advice: update</p> <p>The WPEB RECOMMENDED that when Resolution 12/06 is reviewed, the two hook-shielding devices recommended by ACAP as best practice mitigation measures be incorporated as additional, stand-alone mitigation options for use in IOTC fisheries operating south of 25°S, and that these measures should conform with the technical specifications and performance attributes detailed in the ACAP advice. The WPEB CLARIFIED that if used, the hook-shielding devices would not need to be combined with any other mitigation measure. In relation to the Smart Tuna Hook, the WPEB NOTED that on the basis of information provided, after release from the hook the shield sinks to the seafloor where it corrodes within 12 months, the byproduct of which is iron oxide and carbon. However, the WPEB NOTED concerns regarding pollution associated with the discarded shields of the Smart Tuna Hooks, and REQUESTED that further information be made available to clarify the potential effects.</p>	Update: Pending
Para. 231	<p>Assessment of data submissions in response to IOTC circular 2016-043</p> <p>NOTING that some CPCs with fishing effort south of 25°S have yet to provide the data requested in the data call (IOTC circular 2016-043), the WPEB REQUESTED</p>	Update: Completed Information was received from Australia, EU-Portugal, EU-Spain, EU-France, Japan, Rep. of Korea, Taiwan, China and South Africa and presented to the Scientific Committee in paper IOTC-2016-SC19-INF02.

	that these outstanding data be submitted to the Secretariat prior to the 2016 Scientific Committee meeting.	
Para. 232	The WPEB NOTED the similarity between the summary tables of seabird bycatch requested in circular 2016-043 and the Bycatch Data Exchange Protocol (BDEP) template. Consequently, the WPEB REQUESTED that in the future the Secretariat collate the relevant observer data received into the BDEP template.	Update: [Ongoing] The Secretariat agreed to collate all the relevant observer data (mainly coming through the ROS regional database) in the BDEP format to enhance data exchange with other institutions. Testing of the export facilities is under way.
Para. 237	Review of mitigation measures in 12/06 The WPEB also NOTED the series of seabird bycatch assessment and capacity building workshops for National Scientists planned by BirdLife International and BirdLife South Africa, through the Common Oceans Tuna Project, and ENCOURAGES CPCs with significant tuna longline effort south of 25°S to participate in that process. The WPEB further REQUESTED BirdLife South Africa to report on the outcomes of these workshops at the next meeting of the WPEB.	Update: [Ongoing] Paper IOTC-2017-WPEB13-39 provides an update
Para. 238	Development of management advice on the status of seabird species The WPEB ADOPTED the management advice developed for seabirds, as provided in the draft status summary and REQUESTED that the IOTC Secretariat update the draft stock status summary with the latest 2015 interaction data, and for the summary to be provided to the SC as part of the draft Executive Summary, for its consideration: <ul style="list-style-type: none"> • Seabird (<u>Appendix XVII</u>) 	Update: [Completed]
Para. 250	Ecosystem Based Fisheries Management (EBFM) joint meeting of tRFMOs in 2016 The WPEB NOTED that a joint meeting of tRFMOs will be held in Rome, Italy, in December 2016, to consider progress in applying an ecosystem approach to fisheries management. This meeting is organised by the ABNJ Common Oceans project and the WPEB Chair, SC Chair and IOTC Secretariat will be attending. The WPEB REQUESTED that the outcomes are presented to the WPEB13.	Update: [Completed] The final report of the meeting is available here: http://www.fao.org/in-action/commonoceans/documents/en/ and as paper IOTC-2017-WPEB13- INF09