
PROGRESS ON RECOMMENDATIONS OF THE 26th SESSION OF THE SCIENTIFIC COMMITTEE

PREPARED BY: IOTC SECRETARIAT AND SC CHAIRPERSON, 30 OCTOBER 2023

PURPOSE

To provide participants at the 27th Scientific Committee (SC) with an update on the progress made in implementing the recommendations from the previous SC meeting, and to provide alternative recommendations for the consideration and potential endorsement by participants as appropriate given any progress.

BACKGROUND

At the 26th Session of the SC, 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 SC was endorsed at its December 2023 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.

The Recommendations endorsed by the SC at its 26th Session are contained in [Appendix I](#) for the consideration, review of progress, and revision/reiteration as necessary by the SC27. The SC participants are also encouraged to review the Progress on the Recommendations of Working Parties prepared by the Secretariat and presented to each Working Party for their consideration and revision (IOTC-2024-WPNT14-06, IOTC-2024-WPEB20-06, IOTC-2024-WPB22-06, IOTC-2024-WPM15-06, IOTC-2024-WPTT26(DP)-06, IOTC-2024-WPDCS20-06).

RECOMMENDATION

That the SC:

- 1) **NOTE** paper IOTC–2024–SC27–10 which detailed the progress made in implementing the recommendations and the requests of the 26th Session of the Scientific Committee (SC26);
- 2) **AGREE** to consider and revise as necessary, the recommendations, and for these to be combined with any new recommendations arising from SC27.

APPENDICES

Appendix I: Progress made on the Recommendations of SC26.

Report of the 18th Session of the Working Party on Ecosystems and Bycatch (WPEB18)		
SC26.11 Para. 64	<p>The SC NOTED that several longline fleets targeting swordfish in the IOTC area of competence are using submerged artificial lights (chemical light sticks or electrically powered lights) attached to the terminal gear for the purpose of attracting the target species and further NOTED that Resolution 16/07 prohibits all vessels from using artificial lights to attract fish, without specifying the type of fleet or gear subjected to the Resolution. The SC therefore RECOMMENDED that the Commission provides clarity on whether Resolution 16/07 applies to longline fisheries as the current wording is somewhat ambiguous. The SC also SUGGESTED that Resolution 16/07 could be amended to clearly state which fleets and/or gears are bound by the Resolution to avoid future doubts.</p>	<p>Update: Ongoing. The issue was not raised at the latest Commission meeting. (IOTC-2024-S28-R, para 31) The Commission NOTED that Resolution 16/07 <i>On the use of artificial lights to attract fish</i> (which prohibits using artificial lights for the purpose of aggregating tuna and tuna-like species) requires further clarifications as to which fishery/gear this measure should apply. The Commission REQUESTED the CPCs to provide proposals to revise the Resolution next year.</p>
SC26.12 Para. 66	<p>The SC RECOMMENDED that the Commission consider extending measures to prevent finning of sharks such as fins naturally attached including partially attached and tethered for all fisheries or similar, alternative measures (for example, fins artificially attached), providing they had been assessed and endorsed by the SC and Compliance Committee as being equally or more likely to meet the conservation benefit (of a fins naturally attached measure) and are logistically feasible from a compliance monitoring perspective. The SC NOTED that while such other measures may be logistically more difficult to implement and monitor for governments, they may be more practical (and beneficial to crew safety) for the fishing industry when conducting their fishing operations and storing shark catches on board.</p>	<p>Update: Ongoing. The Commission did not adopt a new Conservation and Management Measure regarding sharks.</p>
SC26.13 Para. 71	<p>Status of development and implementation of national plans of action for seabirds and sharks, and implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations</p> <p>The SC RECOMMENDED that the Commission note the current status of development and implementation of National Plans of Action (NPOAs) for sharks and seabirds, and the implementation of the FAO guidelines to reduce marine turtle mortality in fishing operations, by each CPC as provided in Appendix 6, recalling that the IPOA-Seabirds and IPOA-Sharks were adopted by the FAO in 1999 and 2000, respectively, and recommended the development of NPOAs.</p>	<p>Update: Completed. (IOTC-2024-S28-R, Para 28) The Commission ENDORSED the Scientific Committee's 2023 list of recommendations as its own.</p>

	<p>Report of the 24th Session of the Working Party on Tropical Tunas (WPTT24)</p> <p>Skipjack tuna stock assessment</p> <p>The SC RECALLED that IOTC Resolution 21/03, which superseded Resolution 16/02 requires the skipjack tuna stock assessment estimates to be used as inputs for the Harvest Control Rule (HCR) to calculate the TAC. The SC therefore ENDORSED the stock assessment and that the median estimates from the model ensemble are used to calculate the TAC for skipjack tuna. The SC RECOMMENDED that the Commission endorse the calculated annual TAC of 628 606 t for 2024-2026.</p> <p>Update on the WGFAD05</p>	<p>Update: Completed. (IOTC-2024-S28-R, Para 28) The Commission ENDORSED the Scientific Committee's 2023 list of recommendations as its own. (IOTC-2024-S28-R, Para 17) The Commission NOTED a question regarding the necessity of a catch limit for SKJ, given that the species has been assessed as neither overfished nor subject to overfishing and that the stock is very productive. The Commission NOTED that the current productivity might result from favorable environmental conditions, which may not persist. The catch limit was set by the HCR specified in Resolution 21/03, which simulations have shown to perform effectively over a longer term, on average, under a range of uncertainty.</p>
<p>SC26.14 Para. 96</p>	<p>The SC NOTED the quantitative analyses presented during the meeting (IOTC-2023-WGFAD05-13 and IOTC-2023-WPTT25-INF08). The analyses which were all conducted with a 10 year time frame indicated that the most positive impact on the stocks for the three tuna species, in order of the largest to smallest benefits, would be (i) a three-month complete closure for all gears, (ii) a two-month complete closure for all gears, and (iii) a three-month oceanwide PS log school closure. In addition, several scenarios with closures applied to other gears also achieve the objective of recovering bigeye and yellowfin to the green quadrant of the Kobe plot in 10 years. However, the SC NOTED that these benefits were estimated under the assumption that there would not be an increase in catches from other gears during this time and further NOTED that the full benefits of these closures would only be seen if there is no reallocation of catches to other gears or time periods. The analyses further indicated that the period that would result in the best outcomes from the closure would be during Q1, Q3 and Q4 for BET and YFT and Q3 and Q4 for SKJ. In addition, the SC RECALLED that Resolution 23/03 (para. 3) states that "The IOTC Scientific Committee shall provide advice and recommendations no later than 31st December 2023 on appropriate fishing closures applicable to all fishing gears." As such the SC RECOMMENDED the Commission take these analyses into account, with results shown in Annex IX of the WPTT report (IOTC-2023-WPTT25-R) and Figures a-c (below), and REQUESTED the WPTT to consider conducting further analysis intersessionally to assess the impacts of all gears on stock status so that this issue can be comprehensively addressed. The SC NOTED that some artisanal fleets may struggle to implement closures due to socio-economic dependence on the resources and so REQUESTED that the WGFAD look into excluding artisanal fleets from future analyses.</p>	<p>Update: Ongoing. The S28 discussed the proposal IOTC-2024-S28-PropM <i>On establishing a fishing closure in the Indian ocean for the conservation of tropical tunas</i>. The proposal was based on this quantitative analysis (IOTC-2023-WGFAD05-13) and the conclusion of the Scientific Committee. (IOTC-2024-S28-R, Para 59, 60) Several CPCs noted their dependency on fisheries for both their economy as well as food security and noted that a complete closure for all gears would place a disproportionate burden on them. Other CPCs noted that they already enforced seasonal fishing bans in their coastal waters and requested that the timings of these bans be incorporated into the proposal. The proponents stopped pursuing the adoption of their proposal when it became clear to them that the Commission would not be able to adopt it by consensus. The proponents requested that the SC be tasked with evaluating an effective common period for a fishing ban. The WPTT26 has conducted an updated analysis of the responses of tuna stocks to temporal closures in the Indian Ocean.</p>
<p>SC26.15 Para. 100</p>	<p>The SC NOTED that the Jelly-FAD is an example of how the implementation of biodegradable DFADs can be achieved, further NOTING that other actions have been also carried out in the Indian Ocean for BIOFAD testing using alternative designs and materials and this work has been presented to the WGFAD and WPEB for many years. The SC further NOTED that the IATTC has recently adopted a step-wise approach to the full adoption of biodegradable DFADs (IATTC C-23-04). The SC therefore RECOMMENDED that</p>	<p>Update: Ongoing. The Commission adopted Resolution 24/02 <i>On management of drifting fish aggregating devices (FADs) in the IOTC area of competence</i>. The Resolution has provided provisions of the timeline for CPCs to implement biodegradable DFADs (Res 24/02 para 31 and 32)</p>

<p>SC26.17 Para. 106</p> <p>SC26.18 Para. 114</p>	<p>the Commission initiate an ambitious step-wise approach for the implementation of biodegradable DFADs as soon as possible.</p> <p>Bigeye Tuna MP</p> <p>The SC agreed with the review findings that there was no evidence for exceptional circumstances and RECOMMENDED that the agreed TAC for 2024 and 2025 should remain unchanged.</p> <p>Other Matters</p> <p>Following the presentation of document IOTC-2023-SC26-11 the SC RECOMMENDED that pursuing the development of the Close-Kin Mark Recapture project for yellowfin tuna should be a high priority for the Commission</p>	<p>Update: Completed. (IOTC-2024-S28-R, Para 28) The Commission ENDORSED the Scientific Committee’s 2023 list of recommendations as its own.</p> <p>Update: Ongoing.</p>
<p>SC26.19 Para. 129</p>	<p>Report of the 13th Session of the Working Party on Methods (WPM13)</p> <p>General MSE issues</p> <p>The SC NOTED that there is a need to ensure that any code and input files used for developing MPs is housed internally on an accessible platform, so it is available to other users and not lost when developers move on to other tasks. The SC NOTED that ICES uses a Transparency and Assessment Framework (TAF) which is a useful frontend to direct users to the locations of relevant documents and code (e.g. Github repositories) that enable users to re-run assessments and other analyses, but that a much smaller system would be needed for the IOTC. The SC NOTED that most important information to be curated would be the input files, executables, and control files (not the large volume of output files), and RECOMMENDED that the Commission ensure that the IOTC Secretariat is provided with the necessary resources to manage the curation of this information.</p>	<p>Update: Ongoing. The Commission has not yet provided the resources to the issue.</p>
<p>SC26.20 Para. 138</p>	<p>Report of the 18th Session of the Working Party on Data Collection and Statistics (WPDCS18)</p> <p>The SC ACKNOWLEDGED the request to clarify the issues with data reporting requirements identified with Res. 12/02 and 19/07, as well as the request to change the status of reporting of fishing craft statistics from voluntary to mandatory in Res. 15/02 and RECOMMENDED that the Commission takes these requests in due consideration at the next revision of all concerned resolutions.</p>	<p>Update: Ongoing. Although two proposals were presented to the Commission to revise Resolutions 15/01 and 15/02, they were ultimately not adopted. No new Resolutions were adopted regarding data collection or reporting.</p>

	amended to include the mandatory reporting of sets/operations as an additional unit of effort for longline fisheries.	
SC26.26 Para. 187	<p>General - Consultants</p> <p>Noting the highly beneficial and relevant work done by IOTC stock assessment consultants in previous years, the SC RECOMMENDED that the engagement of consultants be continued for each coming year based on the Program of Work. Consultants will be hired to supplement the skill set available within the IOTC Secretariat and CPCs.</p>	Update: Ongoing. Several consultants were contracted in 2024.
SC26.27 Para. 189	<p>Data preparatory meetings and Hybrid meetings</p> <p>SC26.27 (para. 189) ACKNOWLEDGING that holding data preparatory meetings prior to stock assessments is considered to be best practice (as identified by the yellowfin stock assessment external reviewer, the WPTT and the WPDCS) and noting that since 2019 data preparatory meetings were successfully held for the WPTmT, WPTT and WPEB, the SC AGREED to continue the practice of having data preparatory meetings in addition to stock assessment meetings for the major IOTC species. The SC RECOMMENDED that data preparatory meetings could continue to be held virtually so as not to increase the travel and costs required for the already full IOTC timetable of meetings..</p>	Update: Completed. All data preparatory meetings as well as working group meetings were held virtually in 2024.
SC26.28 Para. 190	<p>The SC NOTED that there had been a few teething problems holding meetings in a hybrid format in 2023, especially related to the costs associated with the audio-visual equipment required, as well as the issues associated with ensuring the equipment was suitable to ensure full participation of both those in person as well as those connecting virtually. However, the SC AGREED on the utility of facilitating both in-person and virtual participation at future meetings to ensure increased participation and reduce the logistical costs for many CPCs and observers. As such, the SC RECOMMENDED that future Scientific Committee meetings continue to be held in a hybrid format, as well as working parties if possible. The SC further RECOMMENDED that all presentations at these meetings be made in person to ensure the aforementioned issues did not adversely affect the quality of the advice being provided.</p>	Update: Completed. All working party meetings as well as the Scientific Committee meeting were held in a hybrid format in 2024.