

## REVISION OF THE WPM PROGRAM OF WORK (2023–2027)

PREPARED BY: IOTC SECRETARIAT, 8 OCTOBER 2021

### PURPOSE

To ensure that participants at the 13<sup>th</sup> Working Party on Methods (WPM13) revise the Program of Work for the WPM by taking into consideration the specific requests of the Commission and Scientific Committee.

### BACKGROUND

#### *Scientific Committee*

At the 24<sup>th</sup> Session of the SC:

- (Para. 175) *The SC **NOTED** IOTC–2021–SC24–08 which provided the SC with a proposed Program of Work for each of its working parties, including prioritisation of the elements requested by each working party.*
- (Para. 176) *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 35a-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.*
- (Para. 178) *The SC **AGREED** on the consolidated table of priorities across all Working Parties, as developed by each WP Chair, and **REQUESTED** that the IOTC Secretariat, in consultation with the Chair and vice-Chair of the SC and relevant Working Parties, develop ToRs for the specific projects to be carried out.*

#### *Commission*

At Sessions of the Commission, Conservation and Management Measures adopted contained elements that call on the Scientific Committee, via the WPM, to undertake specific tasks. These requests will need to be incorporated into a revised Program of Work for the WPM.

At the 23<sup>rd</sup> session of the Commission:

#### **Report of the 5<sup>th</sup> Session of the Technical Committee on Management Procedures (TCMP05)**

*(Para. 46): The Commission **NOTED** that the report from the 5<sup>th</sup> meeting of the Technical Committee on Management Procedures (TCMP) had not yet been adopted and will be done so by correspondence. The Commission **NOTED**, however, that several Recommendations had been reviewed and agreed during the meeting and these were presented to the Commission by the SC Chair who co-chaired the meeting. The Recommendations were as follows:*

- *The TCMP **NOTED** that both candidate MPs for BET, reviewed by the SC, are acceptable and meet the management objectives for the stock. As such the TCMP **RECOMMENDED** that the Commission discuss them both and consider selecting one MP for adoption.*
- *The TCMP **NOTED** that CPCs require time to process the outputs of the SC in order to fully explore and understand the advice provided using the MSE process. To facilitate this, the TCMP **RECOMMENDED** that the Commission endorse holding a virtual TCMP meeting early each year with a view to discuss or narrow down the alternative candidate MPs proposed by the SC, providing*

*sufficient time for CPCs to discuss the outputs of the SC and consider developing proposals based on them. The TCMP would then meet again physically prior to the Commission.*

*(Para. 47): The Commission **SUPPORTED** the important work conducted by the TCMP and **ENDORSED** the Recommendation to hold a virtual meeting early in the year. This would be included in the schedule of meetings from 2023.*

*(Para. 48). The Commission **URGED** the TCMP to continue with capacity building initiatives to facilitate understanding of the process and increase participation by all parties to facilitate smooth implementation of the MSE process.*

*(Para. 49). The Commission **ACKNOWLEDGED** an offer by the PEW Charitable Trusts to support capacity building workshops and activities for MSE. The Commission **REQUESTED** the Secretariat to liaise with PEW to coordinate these activities.*

## **DISCUSSION**

Participants at the WPM13 are requested to consider the priorities set by the Commission and the Scientific Committee, via Conservation and Management Measures, and revise its Program of Work to match those priorities.

## **RECOMMENDATION/S**

That the WPM:

- 1) **NOTE** paper IOTC-2022-WPM13-07, which encouraged the WPM to further develop and refine its Program of Work for 2023-2027 to align with the requests and directives from the Commission and Scientific Committee.
- 2) **RECOMMEND** a revised Program of Work for 2023-2027 to the Scientific Committee for its consideration and potential endorsement.
- 3) **NOTE** Appendix B (Schedule of work for the development of management procedures for key species in the IOTC area) that has been **ENDORSED** by the SC in 2021.

## **APPENDICES**

**Appendix A:** DRAFT: Working Party on Methods Program of Work (2023-2027)

**Appendix B:** Schedule of work for the development of management procedures for key species in the IOTC area.

**APPENDIX A**  
**WORKING PARTY ON METHODS PROGRAM OF WORK (2021–2025)**

**Table 1.** Priority topics for obtaining the information necessary to deliver the necessary advice to the Commission. Resolution 15/10 elements have been incorporated as required by the Commission.

Topic	Sub-topic and project	Timing				
		2023	2024	2025	2026	2027
1. Management Strategy Evaluation	Continuation of Management Strategy Evaluation for Albacore, Skipjack, Yellowfin, Bigeye tunas as well as Swordfish					
	Peer review of BET MSE as per the ToRs endorsed by the SC					
<b>Future Research Requirements (not in order of priority)</b>						
	1.1 Albacore					
Management Strategy Evaluation	1.1.1 Revision of Operating Models based on WPM and SC feedback, including possible robustness tests					
	1.1.2 Implementation of initial set of simulation runs and results					
	1.1.3 Revision of Management Procedures and Indicators after presentation of initial set to TCMP and Commission					

<p>1.1.4 External peer review (2022 or date TBD)</p> <p>1.1.5 Evaluation of new set of Management Procedures (if required)</p>					
<p>1.2 Skipjack tuna</p>					
<p>1.2.1 Revision and adaptation of framework for simulation evaluations of MPs. Moving from HCR to fully specified MP.</p>					
<p>1.2.2 Develop revised production model for inclusion in simulation framework</p>					
<p>1.2.3 Condition OM on updated assessment model from 2020.</p>					
<p>1.2.4 Present revised MP results to TCMP</p>					
<p>1.2.5 Additional iterations if required</p>					
<p>1.3 Bigeye tuna</p>					
<p>1.3.1 Update OM &amp; present preliminary MP results to TCMP, WPTT/WPM review of new OM</p>					
<p>1.3.2 External peer review (2021 or date TBC)</p>					
<p>1.3.3 Present revised MP results to TCMP</p>					
<p>1.3.4 Additional iterations if required</p>					
<p>1.4 Yellowfin tuna</p>					

<p>1.4.1 Update OM &amp; present preliminary MP results to TCMP, WPTT/WPM review of new OM</p>					
<p>1.4.2 Present revised MP results to TCMP; iteratively update development if required)</p>					
<p>1.4.3 additional iterations if required</p>					
<p>1.5 Swordfish</p> <p>1.5.1 Initial OM</p> <p>1.5.2 Conditioning and OM set up</p> <p>1.5.3 Generic MP tests</p> <p>1.5.4 Final Model with MPs</p>					
<p>Multiple stock status derived from different model structures</p>	<p>3.1 Develop specific guidance for the most appropriate models to be used or how to synthesize the results when multiple stock assessment models are presented. (<i>see IOTC-2016-WPTT18-R, para.91</i>)</p>				
<p>Presentation of stock status advice for data limited stocks</p>	<p>2.1 Explore potential methods of presenting stock status advice to managers from a range of data limited scenarios, e.g. through the development of a 'Tier' approach for providing stock status advice, based on the type of indicators used to determine stock status (e.g. CPUE series, stock assessment model)</p>				

Peer Review	External peer review based on Terms of Reference agreed to by the WPM and following the schedule recommended in Appendix V of the WPM12 report.					
Capacity Building	Ongoing development of tools, materials and courses to continue Capacity Building for increasing participation in the MSE process					

**Table 2.** Management Strategy Evaluation schedule for the IOTC Working Party on Methods (WPM) 2023-2027

Species	2023	2024	2025	2026	2027
<i>Working Party On Methods</i>					
Albacore	Technical Guidance on MSE development				
Skipjack tuna	Technical Guidance on MSE development				
Bigeye tuna	Technical Guidance on MSE development				
Yellowfin tuna	Technical Guidance on MSE development				
Swordfish	Technical Guidance on MSE development				

Note: the assessment schedule may be changed dependant on the annual review of fishery indicators, or SC and Commission requests. ALB: albacore; BET: bigeye tuna; YFT: yellowfin tuna; SKJ: skipjack tuna.

## APPENDIX B

## SCHEDULE OF WORK FOR THE DEVELOPMENT OF MANAGEMENT PROCEDURES FOR KEY SPECIES IN THE IOTC AREA

A more detailed explanation of the roles of the Working Parties (WPs), Scientific Committee (SC), Technical Committee on Management Procedures (TCMP) and the Commission are provided below

Year	Albacore	Skipjack	Yellowfin	Bigeye	Swordfish
2021	<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b> Provide advice to the Commission on outcomes from the application of the HCR.  Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>
	<p><b>Commission:</b> Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need for further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b> Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs</p>	<p><b>Commission:</b> Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b> Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b> Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>
	<p><b>WPs/SC:</b> Consider recommendations from the Commission and undertake MSE to provide</p>	<p><b>WPs/SC:</b> Consider recommendations from the Commission and undertake MSE to provide</p>	<p><b>WPs/SC:</b> Consider recommendations from the Commission and undertake MSE to provide</p>	<p><b>WPs/SC:</b> Consider recommendations from the Commission and undertake MSE to provide</p>	<p><b>WPs/SC:</b> Consider recommendations from the Commission and undertake MSE to provide</p>



	advice on the performance of candidate MPs.	advice on the performance of candidate MPs.	advice on the performance of candidate MPs.	advice on the performance of candidate MPs.	advice on the performance of candidate MPs.
<b>2022</b>	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>
	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need for further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies. Decision and adoption of an MP.</p>	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>

	<p><b>WPs/SC:</b></p> <p>Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.</p>	<p><b>WPs/SC:</b></p> <p>Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.</p>	<p><b>WPs/SC:</b></p> <p>Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.</p>	<p><b>WPs/SC:</b></p> <p>Process and application of the adopted MP.</p>	<p><b>WPs/SC:</b></p> <p>Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.</p>
2023	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b></p> <p>Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>	<p><b>TCMP:</b></p>	<p><b>TCMP:</b></p> <p>Provide advice to the Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p>
	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies. Decision and adoption of an MP.</p>	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>	<p><b>Commission:</b></p>	<p><b>Commission:</b></p> <p>Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.</p>
	<p><b>WPs/SC:</b></p>	<p><b>WPs/SC:</b></p>	<p><b>WPs/SC:</b></p>		<p><b>WPs/SC:</b></p>

	Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.	Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.	Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.		Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs,
<b>2024</b>	<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p> <p><b>Commission:</b> Consider work and advice from subsidiary bodies. Decision and adoption of an MP.</p>	<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p> <p><b>Commission:</b> Consider work and advice from subsidiary bodies. Decision and adoption of an MP.</p>	<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p> <p><b>Commission:</b> Consider work and advice from subsidiary bodies. Decision and adoption of an MP.</p>		<p><b>TCMP:</b> Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.</p> <p><b>Commission:</b> Consider work and advice from subsidiary bodies. Decision and adoption of an MP.</p>

## Explanation of roles in the development of candidate Management Procedures

### Working Parties and Scientific Committee

The Scientific Committee (SC) and Working Parties (WPs) are responsible for undertaking the technical development of candidate management procedures (MPs), through formal Management Strategy Evaluation (MSE), and providing advice on candidate MPs to the Commission.

The Working Party on Methods (WPM) is the primary WP for the development of candidate MPs, but other WPs, such as the Working Party on Tropical Tuna (WPTT), Working Party on Temperate Tuna (WPTmT) and the Working Party on Billfish (WPB), may also contribute to MP development for relevant species.

#### *‘Undertake MSE’*

- This involves developing operating models and evaluating the performance of candidate management procedures, which include harvest control rules and the pre-specification of data inputs and analyses, against the Commission’s objectives.

#### *‘Provide advice on the performance of candidate MPs’*

- This involves using the agreed performance statistics and standardised figures and tables to communicate results from MSE. Advice from the SC and WPs to the Commission also includes advice on the appropriateness of limit reference points (LRP) and target reference points (TRP), as required under Resolution 15/10.

### Technical Committee on Management Procedures

Resolution 16/09 states that the objectives of the Technical Committee on Management Procedures (TCMP) include to *‘Enhance the decision making response of the Commission in relation to management procedures, including recommendations made by the Scientific Committee’* and to *‘Enhance communication and foster dialogue and mutual understanding between the Scientific Committee and the Commission on matters relating to management procedures’*.

#### *‘Provide advice to Commission’*

- This involves assisting the Commission to consider the elements of MPs that require a decision by the Commission, including identifying and evaluating candidate MPs that aim to meet the Commission’s objectives.

#### *‘On elements of candidate MPs that require a decision by the Commission’*

- Elements of the MPs to be considered include the overarching management objectives, target and limit reference points, harvest control rules, and the performance of MPs against management objectives.

### Commission

The Commission is ultimately responsible for guiding the MP process and making decisions on the adoption of MPs, drawing on the advice provided by subsidiary bodies.

#### *‘Decision and adoption of an MP’*

- This involves considering a proposed MP, which may take the form of a conservation and management measure proposed by a Commission member, or endorsement of a candidate MP.

#### *‘Consider work and advice from subsidiary bodies’*

- This involves the Commission considering advice from the WPs, SC and TCMP on the performance of MPs in achieving the Commission's objectives. In making decisions on adopting MPs, the Commission may also seek advice on compliance and implementation issues from the Compliance Committee.

*'Provide direction to the WPs/SC on the need for further MSE of candidate or alternative MPs'*

- This involves the Commission providing direction to the WPs and the SC on the need to further refine candidate MPs or develop new candidate MPs through formal MSE. This advice will in turn assist the Commission in its consideration and adoption of MPs.